



# AGRICULTURAL OUTLOOK

September 1988

• Economic Research Service  
United States Department of Agriculture

Drought Hits  
Farm-Export  
Countries

# AGRICULTURAL OUTLOOK

September 1988/AO 145

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# In Brief . . .

## News of Economic Outlook, Food Price Forecast, Drought

The need for rain persists over much of the United States despite heavy rains in some areas in July and August. The drought's effect on farmers' incomes has been uneven. Although some crop farmers have suffered severe losses, others with irrigation or normal rainfall have benefited from the higher prices. Higher feed costs and poor range and pasture conditions are hurting livestock incomes.

The drought began while farm finances were still recovering from the income and debt-restructuring problems of the early and middle 1980's. Improvements in the sector's income and financial position in the last few years, recent gains in the farm balance sheet (including higher land values and lower debt), sales of stocks from past years' crops, and higher prices are helping many farmers endure the drought. But the drought is impeding the financial recovery of some farmers. Farmers suffering severe losses will receive some relief through the recently passed Disaster Assistance Act.

Net cash income for the farm sector as a whole is expected to equal or possibly exceed last year's \$57.1 billion. Net farm income, which reflects inventory draw-downs caused by the crop shortfall, will be some \$3-\$8 billion below last year's \$46.3 billion.

Livestock receipts this year will be slightly above last year's \$76.2 billion, as volume rises for cattle, hogs, and chicken. Except for hogs and milk, livestock prices are stronger than a year earlier. Crop receipts likely will go up as prices received improve and stocks are sold off. The rise in receipts will be partly offset by lower Government program payments and by higher expenses, particularly for livestock feed.

Spring wheat production is estimated 50 percent below last year; corn, 37 percent;



and soybeans, 23 percent. Wheat stocks will be drawn down to half of a year earlier by the end of the 1988/89 crop year, and corn and soybeans to a third.

Reduced supplies are fanning market prices. The average price for wheat during 1988/89 is forecast at \$3.45-\$3.95 per bushel, up from \$2.57 a year earlier; for corn \$2.30-\$2.70, up from \$1.90-\$2.00; and for soybeans \$7.25-\$9.75, up from \$6.15.

The higher prices, plus generally adequate supplies abroad, are reducing export volume prospects for 1988/89. Wheat is likely to be down 12 percent from last year, corn down 4 percent, and soybeans down 29.

Drought-reduced forage supplies and rising feed costs have led cattle and hog producers to reduce the size of some breeding herds. The increased slaughter is boosting meat supplies and lowering prices for the second half of this year, but could tighten supplies next year.

Broiler prices are well above a year earlier, reflecting strong demand as produc-

tion increases. Egg production is below a year earlier, and June and July's higher prices appear to have been temporary.

Among the vegetable crops, processing vegetables have been hardest hit by the drought. Production of green peas, snap beans, and sweet corn, for example, fell short of planned output, and prices rose. Among the fruit crops, tart cherries were hardest hit.

The general economy continues to provide growing markets for farm products, accompanied so far by only moderate increases in wages and non-farm prices. However, recent increases in interest rates reflect some concern about future inflation. Surging exports, buoyed by a relatively inexpensive dollar, are leading to brisk growth, accompanied by the highest rate of capacity utilization in 8 years and the lowest rate of unemployment in 14 years.

The drought is adding to retail prices of some food items, including fats and oils, cereal and bakery products, and some processing vegetables. Average prices for red meats in the second half of this year, however, will drop below those in the first half. The drought is likely to add about one percentage point to the 1988 CPI for food, raising prices 3-5 percent from a year earlier.

Expansions and contractions in agricultural exports affect different rural areas differently. The economic booms and busts that follow export fluctuations are greatest in the 173 counties where total income depends on the farm sector and the farm sector in turn depends on exports. Lagging export sales hurt the economies of these counties in the early 1980's, and the export expansion since 1986 has helped them. But, many of these same counties have suffered severe drought this year and will have lower farm incomes. Thus, the drought will ultimately reduce the income of nonfarm businesses in these counties.





## Agricultural Economy

In this year of drought-reduced farm supplies, it may be difficult to remember that the long-run problem in agriculture is overproduction. This spring and summer we saw the worst pasture and range conditions since records began in 1921. Spring wheat production is estimated about 50 percent below last year; corn, 37 percent; and soybeans, 23 percent. Carryover stocks are being drawn down to alleviate crop losses, and higher prices are reducing domestic and foreign use.

The United States came into the drought with carryin stocks of many commodities larger than considered necessary for normal distribution. The larger stocks, accumulated when demand was weak, were a byproduct of Government programs to maintain farm income while controlling overproduction.

Without such programs, farmers tend to increase output so much that prices are driven below the cost of production. This tendency appears in the agricultural sector of every country, although it is sometimes hard to see.

Even in countries with a limited resource base and extensive hunger, farmers can produce more than will clear the market at profitable prices. A given size of crop can appear as a shortfall relative to hunger, yet a surplus relative to farm income. Lower prices cope with one of these problems, higher prices with the other.

Farmers could have produced more than they did at the price levels of recent years. Nevertheless, we know less about the extent of excess capacity in agriculture than in some other segments of the economy. The labor force, for example, is about 6 percent unemployed. And there are measures of how much more labor is unused because some people have given up looking for jobs and others have accepted less skilled jobs than they are trained to do.

In manufacturing, which even in boom times has 10-12 percent of capacity idle, about 17 percent of capacity currently is unused. This is well below the 30 percent that was idle as recently as 1982.

Few measures of excess agricultural capacity exist. Instead, discussions of farm supply tend to start with the assumption that competition among farmers has squeezed out all forms of inefficiency and that there can be no excess capacity.

One measure of excess capacity for agriculture looks at that portion of potential production absorbed by three Government programs: acreage reduction, food aid, and storage accumulation. By this measure, 5-6 percent of capacity was taken by Government programs during the 1950's and 1960's. During the 1970's, commercial exports expanded and Government involvement was reduced to 2-3 percent.

The rate moved as high as 12 percent during the 1980's when commercial exports fell. But, with shipments up again since 1986, and with reduced production in this drought year, the rate will fall further in 1988 (see the "Resources" article in this issue).

Such measures underestimate the full extent of excess capacity in agriculture. They show only the share of potential production absorbed by Government programs through storage, food aid, or idled land. Other unused capacity exists in underutilized labor, buildings, and machinery and in unused farmland and land that could be used more intensively than it is even under existing prices.

Growing domestic and foreign markets, accompanied by higher prices, induce growth in capacity. Most of the 1970's were times of expanding production, a

period when it was easy to forget the problem of overproduction. Expansion comes through incorporation of more resources, including land and capital; through technical change and better management; through structural and institutional changes such as specialization and larger farms; and through geographic relocation to a better climate, transportation system, or market.

It is easier for farmers to increase capacity than to decrease it because sizing down involves selling assets at a loss. That is why capacity expands rapidly during boom years such as the 1970's and why excess investment and unprofitable production appear during bust years such as the early 1980's. In other words, rapid expansion may involve a trap that later ensnares farmers in overproduction.

Next year, if the weather is normal, farmers will seek to employ some of their underused capacity to rebuild drought-reduced stocks. But after that, they could again have problems with their tendency to overproduce. *[Clark Edwards (202) 786-3313]*

## LIVESTOCK OVERVIEW

Drought-reduced forage supplies and rising feed prices have led cattle and hog producers to liquidate some breeding animals. The increased slaughter has resulted in slightly larger meat supplies from late spring through summer, lowering livestock prices.

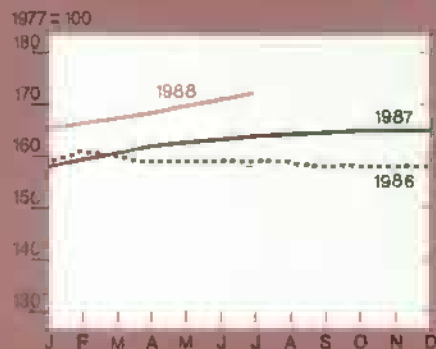
Cattle prices have rebounded from June lows. Increased sow slaughter was due at least as much to the larger June 1 hog inventory as to higher feed prices. Hog prices, however, remain under pressure because of unseasonably large barrow and gilt slaughter and a buildup in cold storage stocks. Cumulative cow slaughter remained below a year earlier through midyear.

### Cattle Numbers Decline

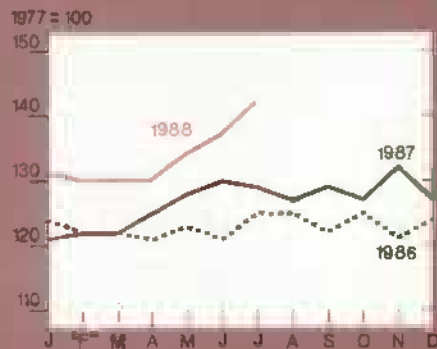
Cattle and calves on farms and ranches on July 1 were below a year earlier. This was the seventh consecutive midyear decline. Beef and dairy cow totals each slipped 1 percent. Beef heifers retained for possible entry into the breeding herd were unchanged from a year earlier, and dairy replacement heifers were down 4 percent.

# Prime Indicators of the U.S. Agricultural Economy

Index of prices paid by farmers<sup>1</sup>



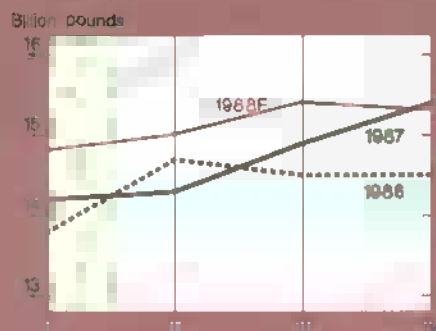
Index of prices received by farmers<sup>2</sup>



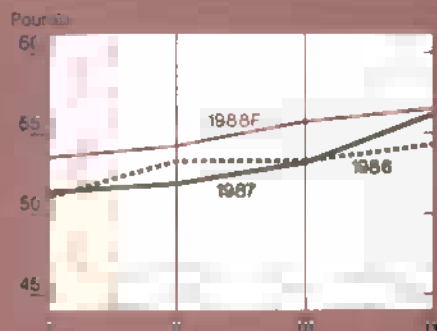
Ratio of prices received to prices paid



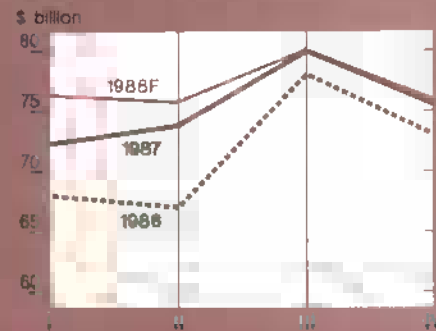
Red meat & poultry<sup>3</sup>  
production



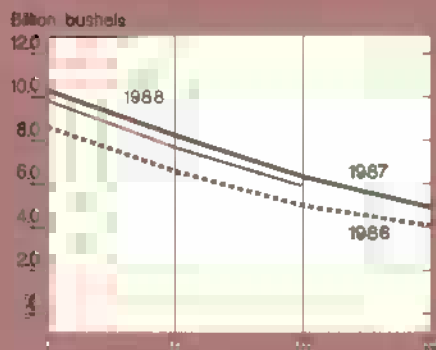
Red meat & poultry  
consumption, per capita<sup>3,4</sup>



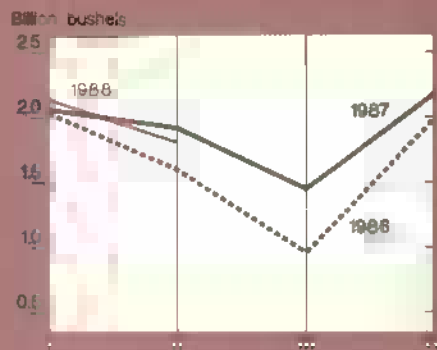
Cash receipts from  
livestock & products<sup>5</sup>



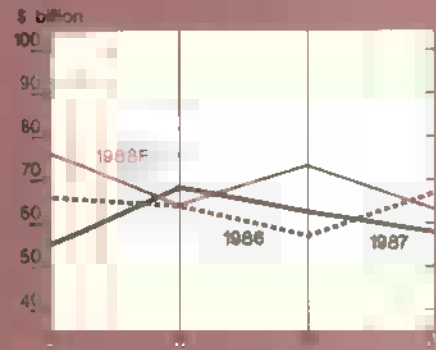
Corn beginning stocks<sup>6</sup>



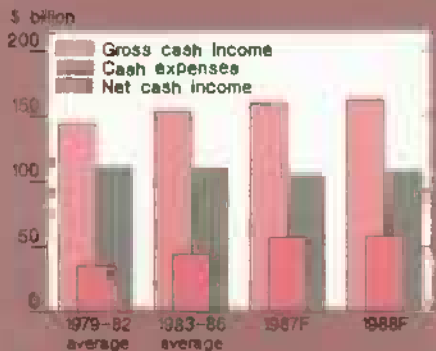
Corn disappearance<sup>6</sup>



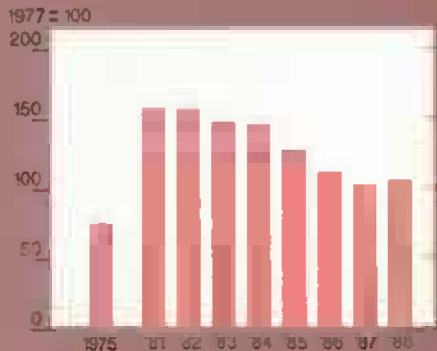
Cash receipts from crops<sup>6</sup>



Farm net cash income



Farm real estate values



Farm value/retail food costs



<sup>1</sup>For commodities and services, interest taxes, and wages. Beginning in 1986, data are only available quarterly. <sup>2</sup>For all farm products.

<sup>3</sup>Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. <sup>4</sup>Retail weight. <sup>5</sup>Seasonally adjusted annual rate.

<sup>6</sup>I = Dec.-Feb.; II = Mar.-May; III = June-Aug.; IV = Sept.-Nov. F = forecast.

### Change in the Beef Carcass-to-Retail Conversion Factor for 1987

Estimates of beef consumption appearing in *Agricultural Outlook* depend on a conversion factor that is applied to carcass weight data to estimate retail weight. A carcass-to-retail conversion factor of 0.74 was used for beef during 1962-85. For 1986, the factor was reduced to 0.73 to reflect closer trimming of fat (down to one-quarter inch) and more boneless cuts.

As indicated in "Beef Data Changes" on page 6 of the March 1988 *Agricultural Outlook*, the carcass-to-retail conversion factor will be reestimated for each calendar year as data become available. The conversion factor for 1987 is 0.71.

The new conversion factor has been used to revise the estimates of per capita retail weight disappearance (consumption) in

the Supply and Utilization data in this issue (table 10). The change reflects trimming fat even more than in earlier years. The Texas A & M National Beef Market Basket Survey taken in late 1987 and early 1988 in 12 cities across the United States was used to recompute the conversion factor.

The change reduces the estimate of retail beef disappearance (per capita consumption) by 2.1 pounds for 1987. The reduced conversion factor indicates that the consumer received more lean beef per pound of product purchased. The closer trimming may not have affected the amount of beef actually ingested very much because the fat and bone now removed before retail sale may earlier have been left in the consumer's pan as grease or on the plate as table scraps. [Ken Nelson and Larry Duewer (202) 786-1712]

For the first half of 1988, reduced cow slaughter, and more replacement heifers entering the cow herd and then calving, helped stabilize the calf crop, which is expected to be slightly larger than the low crop of a year earlier.

During first-half 1988, beef cow slaughter declined 9 percent from the year before and dairy cow slaughter slipped 3 percent. The number of heifers calving increased 10 percent from last year's low.

Even so, cattle numbers are expected to decline in 1988 and again in 1989. Concerns about adequate forage and water supplies this winter may have resulted in fewer heifers entering the breeding herd this summer. High temperatures and poor forage this fall may reduce calving rates in 1989.

For most producers, 1988 will mark the third year of positive returns for cow-calf operations. Although returns have not reached the \$60-\$120 per cow levels of 1978-80, they are an improvement from the losses in 1981-85.

July 1 supplies of feeder cattle available for stocker operations or feedlot placement fell 3 percent, the seventh consecutive year of decline. Supplies of feeder calves were down 1 percent from the

year before, while yearling supplies were down 7 percent. Feeder cattle supplies are the lowest since 1961.

Cattle prices rebounded from their June lows because of drought uncertainties and, more important, the bulge in fed beef supplies. Fed cattle marketings this summer likely were record large. However, movement of finished cattle out of feedlots remains timely; July and early August marketings were large, preventing backups.

Prices for Choice fed steers at Omaha dropped to near \$64 per cwt in late June, but averaged \$65.89 in July. Utility cow prices dropped to \$37.50 in mid-June, but rose to average \$47.03 in July.

Prices for yearling feeder steers at Kansas City fell to \$72 in June before recovering to \$83.75 in late July. Yearlings averaged \$79.08 for July as a whole. In spite of higher feed prices and lower fed cattle prices, prospects for rising fed cattle prices by late 1988 through 1989 are holding up the demand for stocker-feeder cattle.

### Hog Slaughter Up And Prices Down

Barrow and gilt prices slid from the low \$50's per cwt in early June to the middle \$40's in July and August. The weak market contradicted the normal summer

price pattern for the first time since 1979. Hog slaughter, which typically declines in midsummer, rose slightly from June to July and held steady in August.

Meanwhile, stocks of frozen pork, which were 93 percent larger at the beginning of the quarter than a year earlier, started to move out of storage. The combination of rising slaughter and heavy offerings of frozen pork pressured wholesale prices, prompting packers to bid lower for hogs.

Hog slaughter is expected to rise in September and stay relatively high throughout the fall, as the large spring pig crop comes to market. Further price declines are anticipated, with seasonal lows for barrows and gilts likely to reach into the middle to upper \$30's.

The sharp reduction in producers' returns which began in July is likely to intensify. Net returns are expected to average below breakeven for most of the second half.

Pork production in the first half of 1989 is projected about 2 percent above a year earlier, but barrow and gilt prices could be about the same. Prices may average in the middle \$40's per cwt in the first quarter, strengthening to the upper \$40's in the second.

The drought has affected the hog industry primarily by boosting feed costs. However, high temperatures and low humidity have caused lactation disorders, reduced conception rates in sows, and slowed weight gains in market hogs.

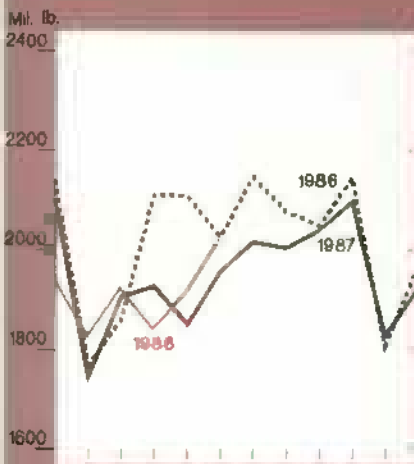
The June *Hogs and Pigs* report indicated a 7-percent increase in June-November farrowings, pigs which mature into first-half 1989 slaughter hogs. However, the biological stress and increased feed costs brought on by heat and drought, along with the anticipation of unfavorable returns, likely will reduce the pig crop in the second half of 1988.

The degree of reduction, which is unclear, will be the primary factor in the outlook for hog prices. To the extent that pig crops and farrowing intentions have been cut back, fourth-quarter 1988 hog prices will fall as breeding animals are sent to slaughter, but 1989 prices will be boosted by the supply reduction. The September *Hogs and Pigs* report will help clarify the issue.

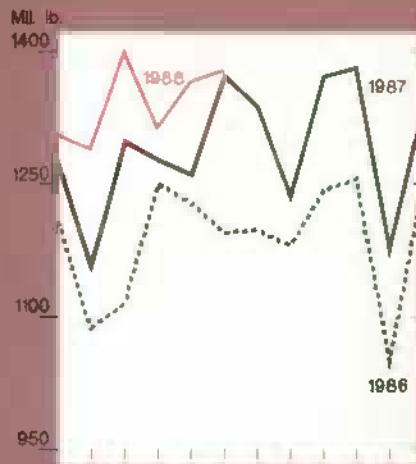


## Production of Livestock and Products

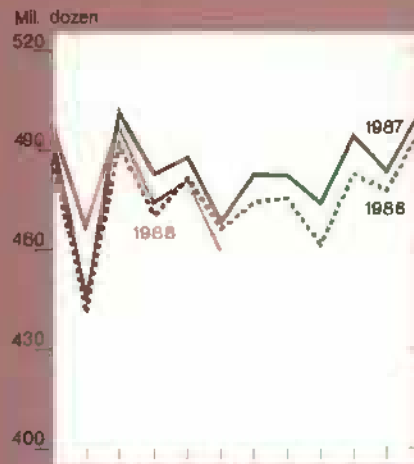
Commercial beef



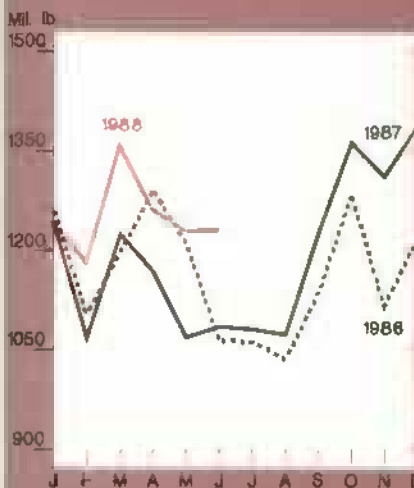
Broilers<sup>1</sup>



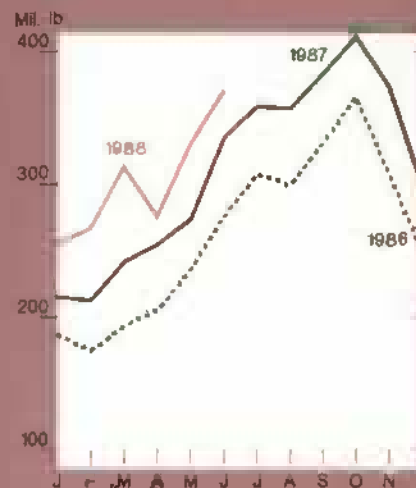
Eggs



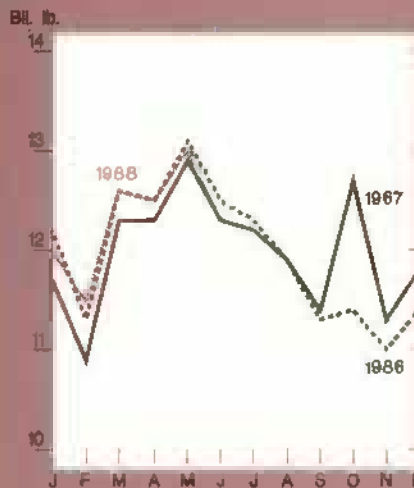
Commercial pork



Turkeys<sup>1</sup>



Milk



<sup>1</sup>Federally inspected production, ready-to-cook.

### Broiler Prices Stronger

The 12-city broiler price averaged 67 cents per pound in July, compared with 47 a year earlier. Prices were boosted by fast-food chain promotions, lower-than-expected production, and higher beef prices.

Third-quarter broiler prices are expected to average 61 to 65 cents per pound. Producers would have suffered greater-than-normal losses and prices would have been even higher if the hot weather had been more humid or if wells had dried up. Fourth-quarter prices will soft-

en seasonally, averaging 50 to 56 cents. The average price for 1988 is expected to be 53 to 56 cents, above the 47 cents recorded a year earlier.

Broiler production for all of 1988 is forecast 4 percent above 1987. Cumulative production for January-June, at 8,056 million pounds, was 5 percent above a year earlier. Average slaughter weights were about the same in both years, in contrast to the trend toward higher weights.

The third-quarter production growth rate probably will be less than that during the first half. June broiler production was

about even with a year earlier, and July production was 2-3 percent higher. May and June hatch, and July weekly chick placements, were only 2 percent above a year earlier. Thus, third-quarter production may rise only 2-3 percent from a year earlier.

Fourth-quarter production may increase 1 percent, and output may then increase 1-2 percent from a year earlier during early 1989. Pullets placed in the broiler hatchery supply flock 7-14 months earlier provide an estimate of future broiler egg-laying capacity; the hatchery supply flock estimate for January 1989 is 4 percent below a year earlier.

## **Broiler Export Gains Continue**

Broiler exports in January through May 1988, at 292 million pounds, were up 7.3 percent from a year earlier. Value increased 1.5 percent to \$134.9 million, with Japan taking one-third of the total. Parts made up 85 percent of exports, up from 80 percent a year before.

Export Enhancement Program (EEP) sales are down, mainly because of import restrictions in key Middle Eastern markets to expand their domestic industries.

The United States is expected to face intense international competition in broiler exports in the near term. The sharp increases in U.S. broiler prices have not yet been matched in Europe, and EC export subsidies are above those of a year earlier. If the U.S. position is to be maintained under the present outlook, EEP bonuses will have to be increased.

## **Turkey Production To Decline**

Turkey producers are expected to reduce production during the second half of 1988. Estimated net returns for the industry were negative for 10 of 12 months between July 1987 and June 1988. For the first time since December 1987, net returns turned positive during July, according to preliminary ERS estimates.

With a strong first half and a weak second, turkey production during 1988 is expected to increase less than 5 percent, after shooting up 19 percent in 1987. The *Turkey Hatchery* report indicates that placements during March-July 1988 were 6 percent below a year earlier. Cumulative placements for 1988 slaughter, from September 1987 through July 1988, were only 2 percent ahead of a year earlier.

January-June 1988 production, at 1,815 million pounds, was about 18 percent ahead of a year earlier. Average liveweights increased nearly 3 percent. Poult placements indicated that second-quarter production likely increased about 14 percent.

Turkey output is slowing dramatically in the third quarter; poult placements suggest production will be down 5 percent from a year earlier. Fourth-quarter

production will probably fall 5 percent below a year earlier as producers face higher feed costs than a year ago.

Turkey stocks on July 1 were 467 million pounds, approximately 22 percent greater than a year earlier. Beginning third-quarter stocks are expected around 575 million pounds, about 10 percent below the 1987 record.

Wholesale prices for hen turkeys in the Eastern region averaged 51 cents per pound during the second quarter, down from 56 cents in 1987. However, Eastern region prices began rising in May and reached 70 cents by mid-July.

Prices are expected to continue rising as holiday buying picks up during the third and fourth quarters and production continues to slow. Eastern hen turkey prices likely will average 70-74 cents during the third quarter and 74-80 during the fourth. Prices for 1988 as a whole are expected to average 61-64 cents, above the 58 cents for 1987. Per capita consumption in 1988 is expected to rise 9 percent to 16.5 pounds.

## **Rapid Rise in Turkey Exports Is Slowing**

During January-May 1988, U.S. turkey exports totaled 20.4 million pounds, 89 percent above a year earlier mostly because of lower U.S. prices. Value increased 57 percent to \$8.74 million.

Some leading U.S. turkey importers—West Germany, Egypt, Taiwan, Japan, and Mexico—increased their purchases, but not Canada. Turkey parts at 41 cents per pound averaged 35 percent cheaper than whole turkey, and parts, most of which are lower priced, made up nearly 90 percent of exports, up from 82 percent a year earlier.

Given higher U.S. prices in recent months, export growth is forecast to slow, but 1988 exports are still likely to exceed last year's 33 million pounds by 15-20 percent.

## **Price Strength for Eggs Appears Temporary**

Egg prices moved sharply higher from mid-June to late July. The gain is attributed to tight supplies of uncontracted eggs resulting from the reduced laying flock. Between June 20 and July 29, wholesale grade A egg prices in New

York increased from 54.5 to 77.5 cents per dozen, a rise of over 42 percent. But prices by mid-August had fallen to the upper 60's.

Consequently, producers realized modest profits in July, following 9 consecutive months of negative net returns. For the second quarter as a whole, though, producers lost an estimated 11.2 cents per dozen (net returns basis). The recent price strength is not likely to hold, and third-quarter net returns are again expected to be negative.

Egg production for 1988 is forecast about 1.5 percent below 1987. Production in the first half was about even with 1987, but the second half is projected to fall around 3 percent from a year earlier because of a large drop in the laying flock.

The total laying flock was 3 percent smaller on July 1 than a year earlier, as the reduction which began in early 1988 continued. The flock that lays table eggs (86 percent of all layers) was 4 percent smaller. In the first half of 1988, hens hatched for the table-egg layer flock were 15 percent below a year earlier, while the July 1 number of table-type hen eggs incubating was 23 percent below a year earlier. Thus, second-half additions to the table-egg laying flock will be much lower than in 1987.

Second-quarter wholesale prices averaged 53.3 cents per dozen, down nearly 2 cents from the first quarter, and almost 6 cents below a year earlier. During July, prices averaged 73.8 cents, the highest since December 1986. Third-quarter prices are expected to average about 72 cents, while fourth-quarter prices likely will be about 73 cents.

## **Egg Exports Boosted By Japan's Purchases**

During January-May, total egg exports were up 45 percent from the same period last year to 56.5 million dozen, worth \$45.4 million. Japan took nearly half of the total, mainly egg products.

Table egg exports were up 127 percent to 14.3 million dozen during January-May. Hong Kong, purchasing nearly 6 million dozen, continues to be the leading buyer of table eggs, and the EEP played a large role. Iraq has expanded domestic production and stopped importing table eggs



under EEP, but it has become a large importer of hatching eggs (2.6 million dozen during January-May) under a GSM-103 credit.

The increases in U.S. egg prices, contrasted with stable or lower prices in several other countries, are expected to slow export growth during the rest of 1988 and into 1989. But 1988 exports are projected to exceed those of 1987.

#### **Growth in Milk Production Slows**

Drought is but one of the factors tightening dairy markets. Milk supplies began to slip well before the drought, primarily because of lower farm milk prices and slightly higher feed concentrate prices.

Output in the second quarter increased about 1 percent, only half the daily average rise during the first quarter. Milk per cow slipped from about 5 percent above a year earlier during the first quarter to only 2 percent above during the second. The second-quarter increase in output per cow was the smallest gain since the last quarter of 1986.

Milk cow numbers during the second quarter were down 1 percent from a year earlier and were 34,000 head below January-March.

During the second half, higher feed costs due to the drought probably will augment the downward adjustment. Predrought forecasts for total 1988 milk production hovered around 145.0 billion pounds. After the effects of the drought were taken into account, this forecast was lowered about 1 percent. Nevertheless, total output for 1988 is expected to remain about 1 percent above 1987.

Milk prices likely will increase considerably during the second half of 1988 if supplies tighten quickly because of drought and structural change. However, the 1988 average price probably will be 3-5 percent below 1987's \$12.54 per cwt. First-half milk prices averaged 64 cents per cwt below a year earlier, mostly because the support price was down 75 cents and the surplus was sizable.

**For further information, contact:** Kevin Bost, hogs; Mark Weimar, Bob Bishop, and Larry Witucki, broilers, turkeys, and eggs; Ron Gustafson and Steve Reed, cattle; and Sara Short, dairy. All are at (202) 786-1285.

## **FIELD CROP OVERVIEW**

### **Spring Wheat Production To Drop**

U.S. wheat production for 1988/89 is forecast at 1,821 million bushels, down 13 percent from the previous year, but not down nearly as much as some other crops. Most of the decline from the drought is in the spring wheat categories of durum and hard red spring. The spring wheat crop is reduced by half, but harvesting is well ahead of the pace set for the previous 5 years, an indication of the advanced stage of the crop and ideal harvest conditions.

Wheat production is down by less than other grains because the winter wheat crop was affected much less by the spring drought. It is forecast at 1,555 million bushels, one of the highest on record. An average market price of \$3.45-\$3.95 is forecast for 1988/89.

Exports accounted for 56 percent of total wheat use in 1987/88, but they are forecast to fall from 1.6 billion bushels (43.3 million tons) in 1987/88 to only 1.4 billion bushels (38.1 million tons) this year because prices are higher and production is adequate in some importing countries. The U.S. share of the market (excluding intra-EC trade) will drop to 40 percent, smaller than the 1987/88 share but still above the two seasons preceding that.

Ending wheat inventories for 1988/89 are projected to fall by over 50 percent, from 1.27 billion bushels to just under 600 million. Stocks at this level reduce the need for large acreage reduction programs. Consequently, the 1989-crop acreage reduction requirement has been announced at 10 percent, down from the 27.5-percent requirement for the past 2 years.

World wheat ending stocks are expected to be drawn down in 1988/89 to the lowest since 1981/82, as both importers and exporters turn to stocks for supplies. Ending stocks are projected at 120 million tons, 19 percent below 1987/88. Most of the decline will occur for drought-stricken durum and other spring wheat in the United States.

Canadian stocks, already low coming into the season, will also fall in response to the dry weather. Canada's wheat production is projected at 18 million tons, down from 26 million in 1987/88. Argentina's production forecast was reduced to 8.5 million tons, 15 percent below 1987/88, because of dry planting conditions.

Although wheat supplies among some exporters are down, others are up. Low beginning stocks will limit Australia's exports, but production is forecast to improve somewhat. The EC, Eastern Europe, and Turkey are likely to raise exports, taking advantage of larger outturns at a time of higher prices. Argentina will continue to be a strong exporter, despite somewhat less-than-anticipated planted area.

World wheat trade in 1988/89 is expected to slip 8 million tons from 1987/88, to 96 million, because of reduced exportable wheat supplies, higher prices, and improved importer production. Some importers will depend on stocks to fill their needs in 1988/89, reducing imports correspondingly. The Soviet Union will decrease imports since its own production has improved this year.

### **U.S. Rice Production Healthy, But World Prices Are Down**

The U.S. rice crop, which is totally irrigated, is in good condition. Over 60 percent of the crop was rated good or excellent as of late July. However, yields are not likely to set a record. With planted acreage estimated up 23 percent, 1988/89 rice production is expected to reach 153 million cwt, a nearly 20-percent increase from the year before.

A projected rebound in world production from drought-reduced 1987/88 rice crops probably will push U.S. rice prices lower in 1988/89. U.S. prices are strongly influenced by world prices.

Both U.S. exports and domestic use are expected to be up in 1988/89. Total use likely will reach 159 million cwt, close to the record set in 1986/87 when sharply lower U.S. prices spurred exports. The world rice crop is expected to exceed 1987/88's by nearly 5 percent. The forecast for 1988/89 is 322 million tons.

## Corn Yield Suffers Heavily From Drought

The drought is continuing throughout the North Central Plains and in the heart of the corn- and soybean-producing areas. Despite a respite for several weeks in July, a return to high temperatures and limited precipitation further stressed corn and soybeans during critical growth stages.

Domestic corn outturn is forecast to fall to 4.48 million bushels in 1988/89, a decline of about 37 percent from a year earlier, and about one-third below the trend. As production drops, U.S. prices for 1988/89 are forecast to rise to \$2.30-\$2.70 per bushel.

Even with substantially reduced production, supplies of corn for the year are likely to be adequate. U.S. ending stocks are forecast to fall below 1.6 billion bushels, down significantly from recent years, but still 22 percent of total use.

World corn stocks are also expected to drop sharply in 1988/89, mostly because of the decline in the United States. World ending stocks are projected at 72 million tons, 50 percent less than in 1987/88 and the lowest in 5 years.

Corn production outside the United States is forecast to reach a record. Corn output in Eastern Europe was reduced this month because of unfavorable weather, but it is still significantly above last year. Higher prices are expected to stimulate production in the Southern Hemisphere. Argentina and South Africa will probably expand plantings in November and December.

Production in Thailand is up sharply and is expected to intensify export competition, particularly in Asian markets. The EC is likely to export more feed grains this season because of substantially larger barley harvests and attractive prices that reduce subsidy costs.

Foreign corn consumption is forecast up 2 percent to 317 million tons in 1988/89. World corn trade has grown very little over the last 3 years. World corn exports are expected to rise to 57.2 million tons, 2.5 percent over last season. But, higher prices and increased foreign export competition may cause a modest decline in

## Generic Certificate Update

As of June 30, 1988, about \$21.3 billion of generic certificates had been issued since April 1985. Certificate redemptions as of August 9 totaled \$19.4 billion, placing near-term availability of certificates at \$1.9 billion.

Issuances in August and September for the Export Enhancement Program and Targeted Export Assistance could bring total certificate availability for the remainder of fiscal 1987/88 to \$2.0 billion. Certificates were trading at 1-2 percent above par value in most locations in mid-August.

Corn continues to account for the majority of total certificate exchanges,

about 87 percent since May 31. Over 357.0 million bushels of CCC-owned corn have been exchanged with certificates, constituting about 37 percent of total corn exchanges.

If certificate exchanges continue at their current pace, certificate availability will be near zero by mid-September.

USDA has not yet announced whether additional generic certificates will be issued in fiscal 1988/89. Legally, the value of available certificates must be backed by commodities held by CCC. As the value of CCC stocks declines, the value of potential certificate issuances will drop as well. [Joe Glauber (202) 786-1840]

Cumulative Generic Certificate Exchanges as of August 9, 1988

Commodity 1/	Unit	CCC Inventory 2/	Producer Loans	Total
<b>Food grains</b>				
Wheat				
Volume	Mil. bu.	747.5	619.9	1,367.4
Value	Mil. \$	1,921.2	1,566.6	3,487.8
Rice				
Volume	Mil. cwt	42.2	0.4	42.5
Value	Mil. \$	154.0	1.6	155.6
<b>Feed grains</b>				
Corn				
Volume	Mil. bu.	1,217.2	6,992.2	8,209.4
Value	Mil. \$	2,446.6	11,912.5	14,359.1
Grain sorghum				
Volume	Mil. bu.	147.6	654.9	602.5
Value	Mil. \$	270.9	652.2	923.1
Barley				
Volume	Mil. bu.	92.4	158.7	251.1
Value	Mil. \$	145.1	258.5	403.6
Cotton				
Volume	Mil. bales	.90	6.17	7.06
Rye, oats, soybeans				
Value	Mil. \$	23.7	34.0	57.7
<b>Total value 3/</b>	<b>Mil. \$</b>	<b>4,961.6</b>	<b>14,425.4</b>	<b>19,387.0</b>

1/ Other program commodities, for which few or no exchanges have been made, include honey, nonfat dry milk, butter, and cheese.  
2/ CCC loans as of August 5, 1988. 3/ Does not include values for cotton exchanges.

Source: Agricultural Stabilization and Conservation Service, USDA.

U.S. exports of nearly 2 million tons from a year earlier.

Some importers, such as China and Egypt, are forecast to reduce purchases because of higher prices and limited financial resources. But other importers, such as Japan and Korea, are forecast to increase purchases despite the higher

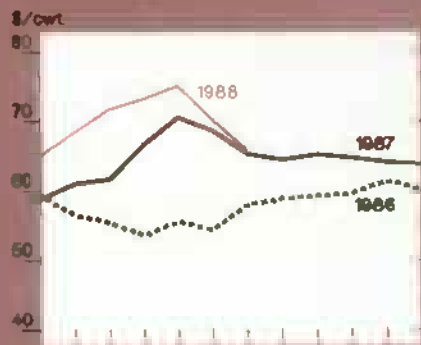
prices. Japan and Taiwan could import corn from Thailand, which they generally bypass because of its high aflatoxin content.

## U.S. Soybean Exports To Drop Dramatically

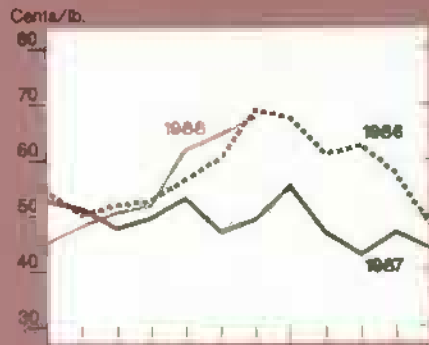
Hot, dry weather throughout the Corn Belt continued to fan volatile soybean markets as the 1988 crop entered the criti-

# Commodity Market Prices

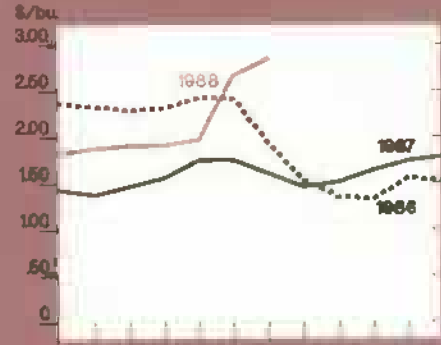
Choice steers, Omaha



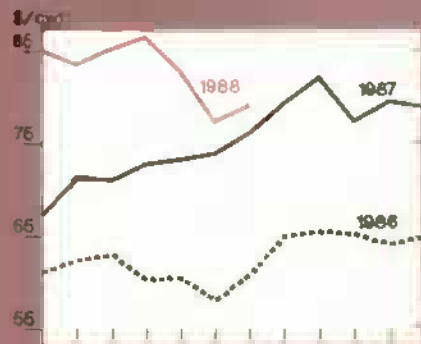
Broilers, 12-city average



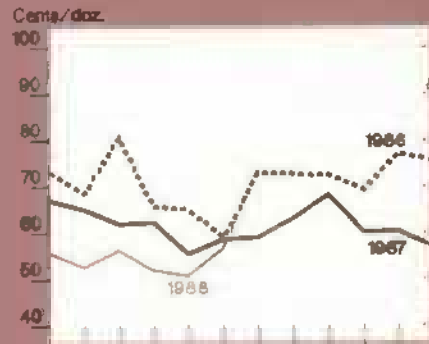
Com. Chicago<sup>3</sup>



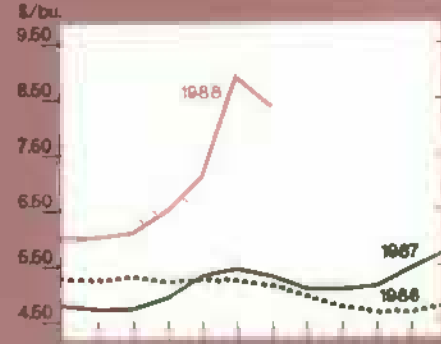
Feeder cattle, Kansas City<sup>1</sup>



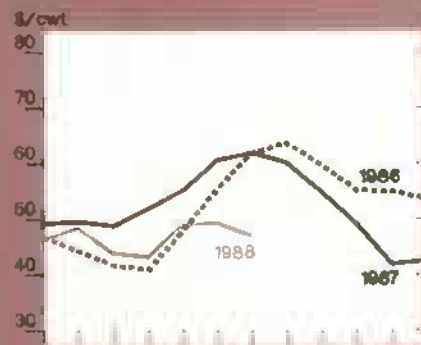
Eggs, New York<sup>2</sup>



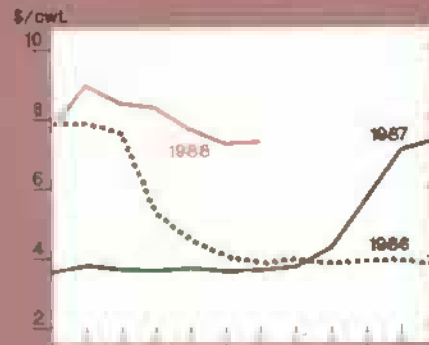
Soybeans, Chicago<sup>4</sup>



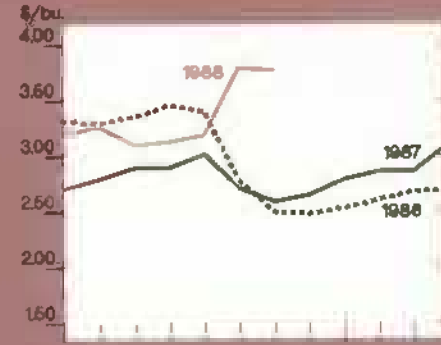
Barrows and gilts, 7 markets



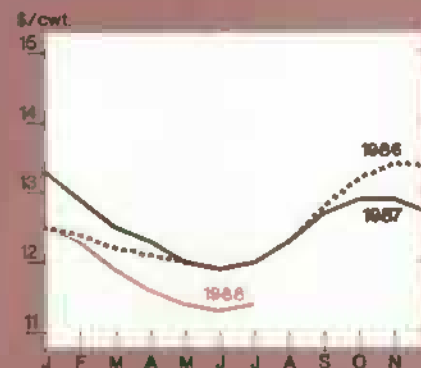
Rice (rough), SW Louisiana



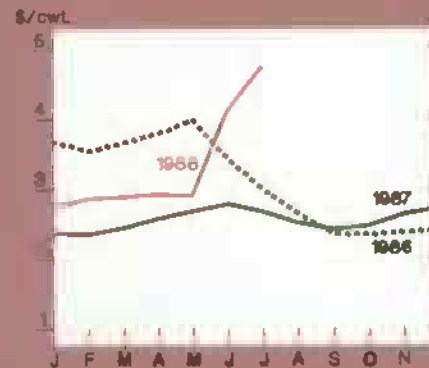
Wheat, Kansas City<sup>5</sup>



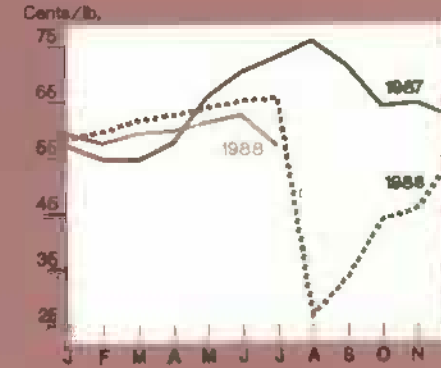
All milk



Sorghum, Kansas City



Cotton, average spot market



<sup>1</sup>600-700 lbs., medium no. 2. <sup>2</sup>Grade A large.

<sup>3</sup>No. 1 yellow. <sup>4</sup>No. 2 yellow. <sup>5</sup>No. 1 HRW.



cal pod-setting and pod-filling stages. Prospects are for drastically reduced yields. Soybean meal prices are forecast to average \$235-\$285 per short ton in 1988/89, well above the \$225 estimated for 1987/88.

Higher soybean meal prices have not yet curtailed domestic or export use, postponing the rationing that must accompany a short crop. Consumption of soybean meal in 1987/88 is estimated at 19.3 million tons, an increase of 4 percent from the preceding season, but consumption in 1988/89 is forecast to decline 10 percent.

Although soybean oil prices have retreated from their 30-cent-per-pound highs of late June and early July, prices will average higher in 1988/89 than last season. Soybean oil prices are forecast to range between \$0.23 and \$0.28 per pound, well above the \$0.225 average expected for 1987/88. Higher domestic prices for soybean oil, ample foreign vegetable oil supplies, and lower U.S. soybean oil exports will result in the United States' becoming a net importer of vegetable oil in 1988/89.

U.S. soybean production is forecast at 1.47 billion bushels, 23 percent below last year. This drought-reduced crop is the lowest since 1976. Yields are forecast at 26.0 bushels per acre, the lowest since the 1974 crop.

Because U.S. soybean production is a large portion of world output, global production is expected to fall 8 percent to 94.1 million tons. However, higher prices are likely to expand Southern Hemisphere planting, and foreign production is expected to rise almost 7 percent in 1988/89.

Higher prices will significantly depress imports, particularly in the EC and the USSR. Japan is expected to reduce imports somewhat less sharply. World soybean exports are projected to fall from 29.8 million tons in 1987/88 to 25.7 million in 1988/89.

U.S. exports will drop 29 percent to 15.2 million tons. With larger crops expected in Brazil and Argentina later in the season, foreign exports are forecast to rise 24 percent to 10.4 million tons.

Foreign competition in soybean, meal, and oil exports will increase dramatically. Both Brazil's and Argentina's

policies favor exports of higher value meals and oils. U.S. exports of meal are forecast to drop 31 percent to 4.2 million metric tons, while U.S. oil exports, forecast at 567,000 tons for 1988/89, will be 39 percent below 1987/88.

#### ***Cotton Exports Fail as Production Rises***

An unexpected rise is projected for U.S. cotton production in 1988/89, from the 14.8 million bales of 1987/88 to 14.9 million. Improved crop conditions raised yield expectations. Harvested area is projected 16 percent above last season. With use dropping, U.S. ending stocks are projected to reach 8.9 million bales, the second largest since 1966/67.

Foreign cotton production is also rising, forecast up 5.5 million bales to 71 million in 1988/89. Although it is early in the season, forecasts for India and Turkey have been raised to record levels because of excellent growing conditions so far. Most other major producers expect larger crops.

However, world consumption for 1988/89 is projected to be almost unchanged from the previous year, with growth among major foreign producers and declines among major importers. As production rises and import demand falls, competition will intensify. World exports are expected to drop about 2 percent to 23.5 million bales.

Most of the trade drop is forecast to occur in the United States. The more competitively priced foreign exports are forecast to be up 8 percent, while U.S. exports are projected to fall to 4.7 million bales from 6.6 million in 1987/88. The U.S. share of world exports likely will drop from 27 percent to 20. [James Cole (202) 786-1840 and Carolyn Whitton (202) 786-1826]

**For further information, contact:** Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livczey, domestic rice; Peter Riley, world feed grains; James Cole, domestic feed grains; Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Bob Skinner, domestic cotton; Jim Schaub, domestic peanuts. World information (202) 786-1824; domestic (202) 786-1840.

## **HIGH-VALUE CROP OVERVIEW**

### ***Consequences of Drought Becoming Apparent***

Assessment of 1988 drought damage to high-value crops is possible now that the season has advanced. Farmers in irrigated areas are past the time when they can boost output through extra planting, and rainfall in dry areas now would not substantially reverse crop damage.

The drought disrupted normal production and marketing of Midwestern processing vegetables, dry beans, sugarbeets, and tart cherries; prices rose in anticipation of reduced supplies. Drought damage had less influence on the markets for other fruits, tobacco, sugar, tree nuts, and fresh vegetables.

### ***Processing Vegetables Hurt Most***

The greatest impact among fruit and vegetable crops was on processing vegetables in Wisconsin, Minnesota, Michigan, and Illinois. In these States, production fell short of planned output and prices rose.

Green pea production fell 50 percent below 1987 in Wisconsin and Minnesota because of drought-reduced yields. These two States produced over half the 1987 output.

Snap bean output under contract with processors is forecast down 14 percent from last year. Contracts accounted for 91 percent of last year's production. Production in Michigan, Minnesota, and Wisconsin is forecast down 20 percent. Half the 1987 crop came from these three States. A hot summer and limited moisture ravaged snap bean fields in Arkansas, Pennsylvania, and New York.

Despite helpful rain in late July in some producing areas, Midwestern canners expect their sweet corn pack to fall 30-50 percent short of plan. Similar production shortfalls are reported for Midwestern canned beets, carrots, lima beans, and tomatoes.

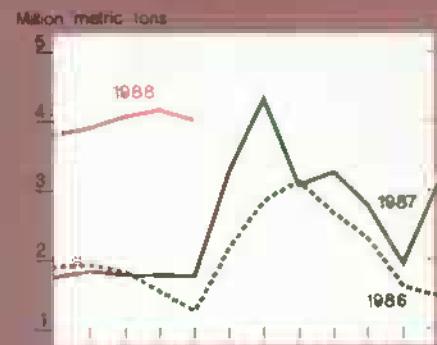
Most processing tomatoes are grown in California (88 percent of the U.S. crop in 1987), so drought-reduced output in the Midwest will have little effect on total tomato supplies or prices.

# U.S. Agricultural Trade Indicators

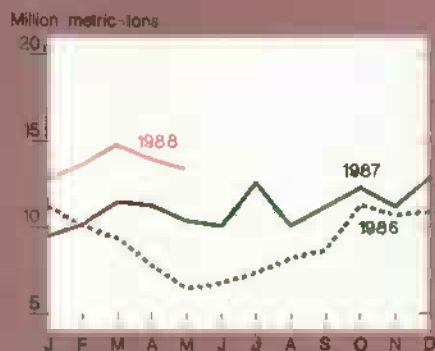
U.S. agricultural trade balance



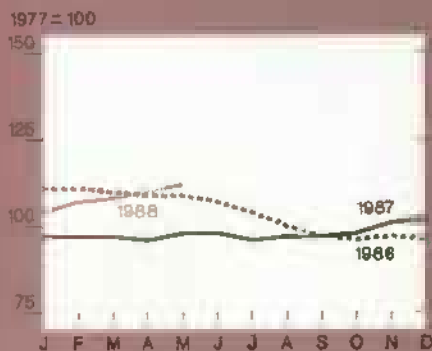
U.S. wheat exports



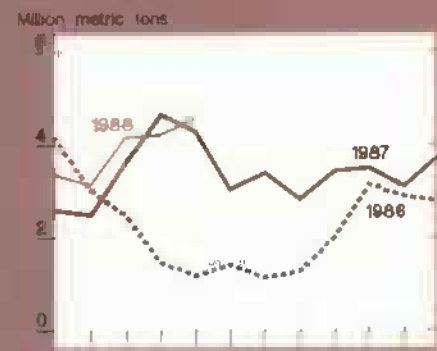
Export volume



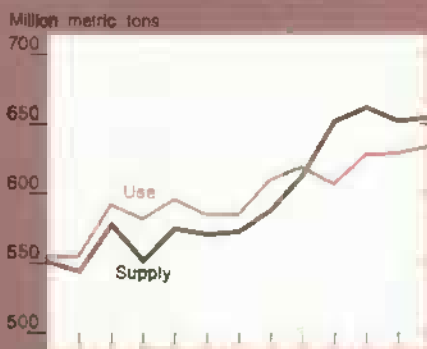
Index of export prices



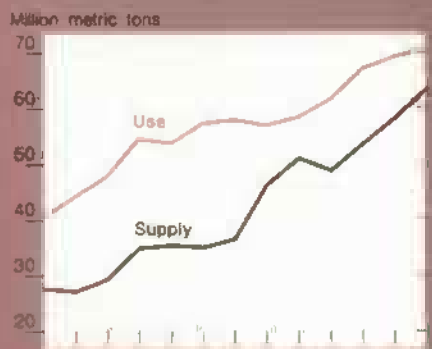
U.S. corn exports



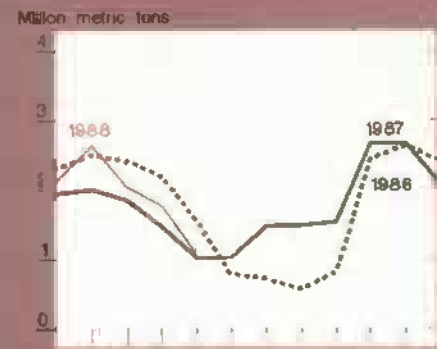
Foreign supply & use of coarse grains



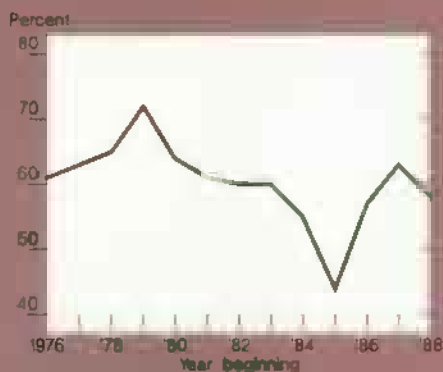
Foreign supply & use of soybeans



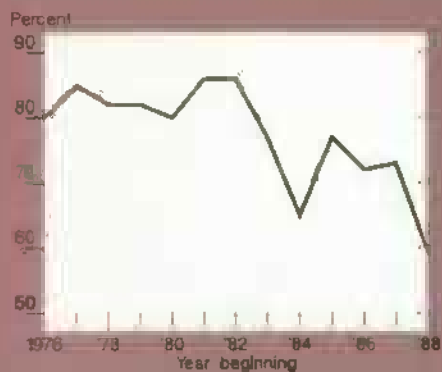
U.S. soybean exports



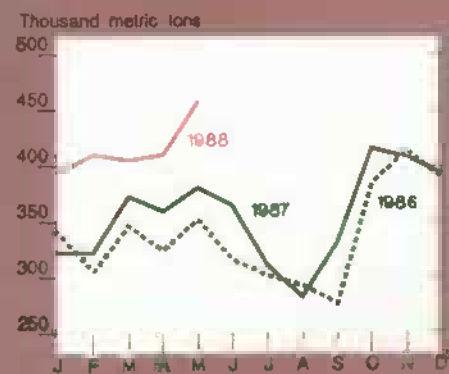
U.S. share of world coarse grains exports<sup>1,2</sup>



U.S. share of world soybean exports



U.S. fruit & vegetable exports<sup>3</sup>



<sup>1</sup>Excluding intra-EC trade <sup>2</sup>October-September years

<sup>3</sup>Includes fruit juices.

In mid-August, canners were quoting f.o.b. prices 25-35 percent higher for green peas, snap beans, and sweet corn than at the beginning of the summer. The CPI for processing vegetables rose 2 percent between May and June, partly reflecting price increases caused by the drought. It likely will rise further in the months ahead as wholesale price increases work their way through the marketing channel (see "Food and Marketing" in this issue).

#### ***Fresh Vegetables Not Severely Affected***

Fresh vegetable shipments from the major U.S. production areas are slightly ahead of last year. Output from California, the major producing State, has not been affected by the drought because crops are irrigated. Fresh output from some drought areas reportedly is down. Because these areas normally provide only a small portion of total supplies, however, the effect on fresh vegetable prices has been minimal.

Through June, the CPI for fresh vegetables was running higher than last year, largely because disease and weather in the winter cut lettuce supplies from California. This summer's abundant lettuce supplies helped offset the effects of drought-reduced output on other vegetable prices, lowering the CPI for fresh vegetables from the higher levels seen earlier this year.

#### ***Dry Edible Beans Badly Damaged***

A large 1987 crop had driven prices down for most types of dry edible beans. Because of lower prices and stronger markets for corn and soybeans, dry bean growers indicated in March that they would cut acreage 23 percent from last year; Michigan growers planned to reduce acreage 47 percent.

With prospects for reduced acreage, dry bean prices rose sharply in time for farmers to respond by planting more than their March intentions. The U.S. acreage of all types of dry beans for harvest fell only 13 percent from 1987; Michigan's fell 43 percent. From an historical perspective, 1988 acreage is 8 percent above the previous 9-year average.

In August, USDA estimated 1988 dry bean production at 21 million cwt, 20 percent lower than in 1987. Forecasts fell 50 percent below last year's output in Michigan, 32 percent in North Dakota, and 55 percent in Minnesota, while rising 14 percent in Nebraska and 7 in Colorado. Lower yields forecast for Michigan (down 13 percent), Minnesota (down 47), and North Dakota (down 36) were due to hot, dry weather which damaged fields from New York to North Dakota.

Market prices for the major dry edible beans were unsettled in early August. Michigan navies averaged around \$38.00 per cwt, Colorado pintos \$30.50, and Nebraska great northern \$34.50. Prices received by farmers for all types of dry edible beans averaged \$27.30 in July, compared with \$19.40 a year earlier.

#### ***Tart Cherries Hardest Hit Among Major Fruit Crops***

Tart cherry production sustained heavy damage from the drought. Output is estimated 42 percent lower than in 1987 and 8 percent lower than in 1986. Dry weather provided the second hit of a one-two punch to producers in Michigan, where severe spring freezes destroyed much of the crop in the bloom stage. In early August, Michigan freezers were quoting f.o.b. prices 50 percent higher than at the end of May.

The drought likely will have minimal effect on other major fruit crops. Dry weather has been credited with reducing the size of peaches in Alabama and North and South Carolina, dropping August estimates of Southern State peach production 3 percent below June forecasts. Nevertheless, total peach production is forecast 4 percent above last year.

The apple crop is forecast 23 percent below last year's record output, but 2 percent above 1986. Dry weather likely contributed only minimally to this year's drop. Late spring freezes in Michigan, winter damage in parts of New York, and tree stress from last year's record crop in Washington appear to be the principal culprits.

#### ***Sugarbeet Production Down, But Sugarcane Higher***

USDA forecasts 1988/89 beet production at 25.7 million tons, compared with 27.9 million last season. The smaller production is the result of reduced yields, especially in the Red River Valley of Minnesota and North Dakota. Dry, windy weather in May caused soil erosion, forcing many growers to replant. Record high temperatures and unseasonably short soil moisture stressed the crop throughout the growing season. Sugarbeet crop conditions in other growing areas are good to excellent.

The sugarcane crop is proceeding well, and cane production is forecast to rise about 4 percent, to 31.1 million tons in 1988. Weather has been favorable for growth, and yields likely will average 1.5 tons above a year earlier.

#### ***Flue-Cured Tobacco Output Up, Burley Yields Drop***

Despite hot and dry weather in the early part of the growing season, flue-cured tobacco yields are forecast 3 percent higher than last year and production 12 percent higher, at 775 million pounds.

Burley tobacco has suffered from the drought. Crop estimates place 1988 yields 5 percent lower than last season and production at 413 million pounds, 1 percent lower. All tobacco production is forecast at 1.26 billion pounds, 6 percent above last year. [Glenn Zepp (202) 786-1883]

**For further information, contact:** Ben Huang, fruit; Shannon Hamm, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco. All are at (202) 786-1886.





## Commodity Spotlights

### Law Guides Meat Import Levels

Under the meat import law, imports for 1988 through August 13 were 994 million pounds (product weight), or 4.4 percent above a year ago. Imports from Australia, New Zealand, and Canada—the largest meat exporters to the United States—were up 14, down 3, and down 22 percent, respectively. While New Zealand's 1988 exports are down slightly from year-ago levels, its shipments were record large in 1987. Imports are up from the Central American countries.

The relatively large meat imports this year stem from favorable U.S. beef prices and drought in Australia. Australia's drought boosted its cattle slaughter, resulting in an unusually fast pace for beef exports to the United States through May. A voluntary restraint agreement (VRA) was in effect in 1987, resulting in large supplies of beef entering the U.S. market in early 1988.

The trigger level for meat import restrictions in 1988, at 1,525.5 million pounds, is 6 percent above that for 1987. Calendar 1988 imports are expected to exceed the 1,459.7 million pounds in 1987 when VRA's were imposed. The end of Australia's drought likely will slow its exports, and the opening of the Japanese market probably will mean that a larger quantity of Australian beef will go to Japan.

However, while the monthly pace of Australian exports has declined recently, the rate must slow further for the remainder of the year to avoid triggering import restrictions. Together with larger exports from Central America, Australian shipments mean that total imports remain large.

U.S. meat imports covered by the law (beef, veal, mutton, and goat) tend to be processing meats used in hamburger and sausages. The Meat Import Act, which passed in 1979 (amending a 1964 law), authorizes the imposition of import controls for fresh, chilled, and frozen beef, veal, mutton, and goat (but not lamb); it does not cover canned or cooked products. In 1987, 89 percent of these meat imports fell under the meat import law.

### Trigger is 110 Percent of Ceiling

The law mandates restrictions on imports if they are expected to exceed 110 percent of the adjusted base quantity, set each December for the following year.

The adjusted base quantity is an import ceiling set at the beginning of each year according to a two-part formula; the first part comes from the 1964 law. It adjusts the adjusted base quantity for production trends. It considers a 3-year moving average of domestic production of meats subject to the law relative to base years 1968-77.

Higher production relative to the base permits higher imports. Domestic production is the commercial carcass weight reported in *Livestock Slaughter* minus the estimated carcass weight equivalent of feeder cattle imports.

For the 1988 estimate, the 3-year moving average of 23,822.8 million pounds included actual 1986 production, preliminary estimates of 1987 production, and projected 1988 production.

The second part of the formula, known as the countercyclical factor, was added by the 1979 law and is based on domestic cow slaughter. It adjusts imports of covered meats as levels of cow slaughter change during domestic production cycles.

This part of the formula reflects fluctuations in the cattle cycle and processed beef supplies. It is calculated as a 5-year average of per capita federally inspected cow beef production (processing beef, carcass weight) divided by a 2-year average. As cow beef production decreases relative to that in prior years, the countercyclical factor (that is, the 5-year over the 2-year average) increases, allowing more processing meat in.

These two factors are multiplied times the basic import level (1,204.6 million pounds) to arrive at the ceiling. There is an import floor of 1,250 million pounds, and the President has authority under cer-

#### 1988 Calculations Under the Meat Import Law

<b>DOMESTIC PRODUCTION FACTOR (million pounds)</b>	
3-year moving average of domestic commercial production of covered meats, 1986-88 1/	23,822.8
Less average total carcass weight of live cattle imports, 1986-88	-464.5
3-year average net production	23,358.3
Average domestic production of covered meats, 1968-77	23,184
Less average total carcass weight of live cattle imports, 1968-77	-220
Base year net production	22,964
Production factor	$\frac{23,358}{22,964} = 1.0172$
<b>COUNTERCYCLICAL FACTOR (pounds)</b>	
5-year moving average, U.S. per capita cow beef supply, 1984-88 2/	15.20
2-year moving average, U.S. per capita cow beef supply, 1987-88 2/	13.43
Cyclical factor	$\frac{15.20}{13.43} = 1.1318$
ADJUSTED BASE ALLOWABLE IMPORTS, 1988 3/	$1.0172 \times 1.1318 \times 1,204.6 = 1,387$
TRIGGER LEVEL FOR 1988 4/	$1,387 \times 1.1 = 1,525$

1/ Beef, veal, mutton, and goat meat. 2/ Derived from federally inspected cow slaughter. 3/ The base quantity, the average import level for 1968-77, is 1,204.6 million pounds. 4/ The trigger level is 110 percent of the adjusted base quantity. Totals may not add because of rounding.

tain conditions to suspend quantitative limitations.

### Meat Imports Reviewed Quarterly

The 1988 adjusted base quantity for meat imports is 1,387 million pounds, and the trigger level is 1,525 million pounds.

Estimates of the quantity of meat products that would enter the United States without the meat import act are released quarterly. The first quarterly estimate for the year's imports is released with the adjusted base quantity prior to January 1. Updated import estimates are released on April 1, July 1, and October 1.

The third-quarter estimate of annual imports, released on July 1, was 1,510 million pounds, 15 million below the trigger. Therefore, USDA was not required to impose import restraints as of July 1.

An alternative to imposing import controls would be for countries to voluntarily agree to restrain their shipments to the United States through the end of the calendar year. Voluntary restraint agreements with the major meat exporters—Australia and New Zealand—were negotiated in 1987 and in 12 of the past 23 years.

The law also provides that under certain circumstances, quantitative limitations could be suspended without voluntary restraint agreements. The suspension would open the U.S. market. *(Richard Stillman and Ron Gustafson (202) 786-1710)*

### Rapeseed Oil Use Gains In United States, World

The past 5 years have seen a swift rise in rapeseed oil consumption. Although it is only 2 percent of U.S. edible vegetable oil use, rapeseed is among the top oils consumed in the world. It is nearly tied with sunflowerseed oil for third place, behind soybean and palm oils. Rising supplies of rapeseed oil have made it one of the cheapest vegetable oils traded.

Rapeseed is a Northern Hemisphere crop with spring and winter varieties. Over 80 percent of production is concentrated in the European Community, China, India, Eastern Europe, and Canada. U.S.

production is minimal and restricted to contract acreage.

World production of rapeseed is forecast at 21.5 million tons in 1988/89 (October-September), nearly 11 percent of world oilseed output. Rapeseed's share of world output has grown every year since 1980/81, when it stood at 7 percent.

Rapeseed has a high oil content—about 40 percent, compared with 18 percent for soybeans—and traditionally has been crushed for oil rather than for meal. Production of rapeseed oil is forecast at 7.2 million tons in 1988/89, 14 percent of world output of edible oil.

### New Varieties, EC Support Policy Increase Supplies

World supplies of rapeseed oil have increased significantly in recent years, although a slight decline is forecast for 1988/89. Commercial introduction of improved seed varieties, the EC's policy of supporting high oilseed prices, and favorable returns to producers in Canada and China have triggered a major expansion in rapeseed area and crush. World rapeseed oil output in 1986/87-1988/89 will average 28 percent higher than in 1983/84-1985/86.

Quality changes in the product are improving consumer and producer acceptance. In the early 1970's, commercial varieties with low levels of undesirable

erucic acid were developed, expanding the food use of rapeseed oil. These varieties are called "single low." Later, "double low" varieties added the benefit of low levels of glucosinolate, a compound that had restricted the use of rapeseed meal in livestock feeding.

EC support prices for its main oilseeds—rape, sunflower, and soybean—rose sharply in the late 1970's and have remained high. Higher prices and, particularly for rapeseed, the use of higher yielding varieties increased oilseed production.

Because EC oilseed prices are supported through crushing subsidies, rapeseed meal and oil production have also expanded greatly. Average annual production of rapeseed oil in 1986/87-1988/89, for example, will be 1.9 million tons in the EC, 43 percent above 1983/84-1985/86.

Production in China and Canada will be up nearly one-third in 1986/87-1988/89 from 1983/84-1985/86.

### Higher Supplies Mean Lower Prices, Increased Trade

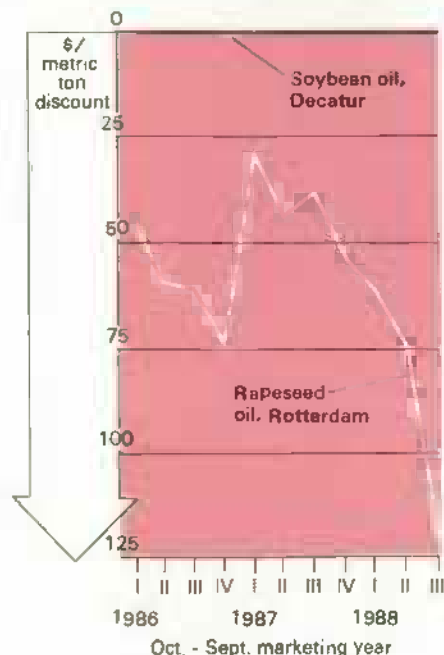
Per capita vegetable oil consumption is stable in Canada and the EC, so much of their increase in rapeseed oil is being exported. Total world exports in 1986/87-1988/89 are expected to be up 43 percent over 1983/84-1985/86 (versus a 15-per-

Rapeseed Oil Production & Trade 1/

	1983/84- 1985/86 average	1986/87	1987/88 P	1988/89 F
Million metric tons				
Production, world	5.550	6.784	7.410	7.210
EC	1.324	1.604	2.011	2.070
China	1.390	1.737	1.987	1.770
India	0.836	0.792	0.850	0.860
Eastern Europe	0.580	0.687	0.655	0.670
Canada	0.489	0.633	0.645	0.660
Exports	1.198	1.662	1.742	1.740
EC 2/	0.382	0.328	0.407	0.313
Canada	0.193	0.306	0.270	0.280
Eastern Europe	0.058	0.092	0.108	0.108
Imports, world	1.130	1.444	1.490	1.490
EC 3/	0.405	0.394	0.341	0.347
North Africa	0.233	0.244	0.233	0.228
China	0.008	0.100	0.125	0.225
India	0.216	0.241	0.300	0.150
East Asia	0.071	0.092	0.107	0.107
United States	0.025	0.087	0.150	0.200

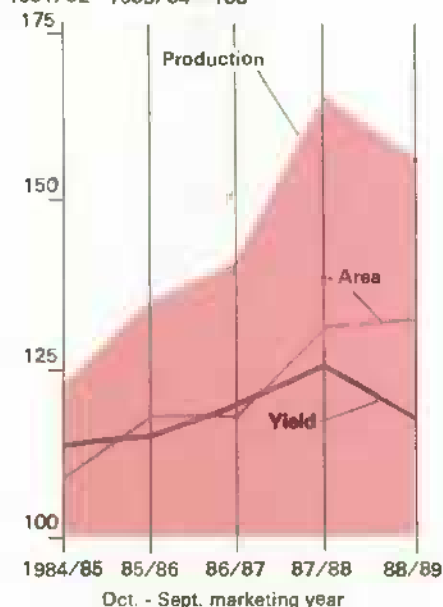
1/ October-September year. 2/ Exports net of intra-EC trade.  
3/ Intra-EC trade. P = preliminary. F = forecast.

### Imported Rapeseed Oil Price Is Well Below Domestic Soybean Oil Price



### World Rapeseed Production Continues High

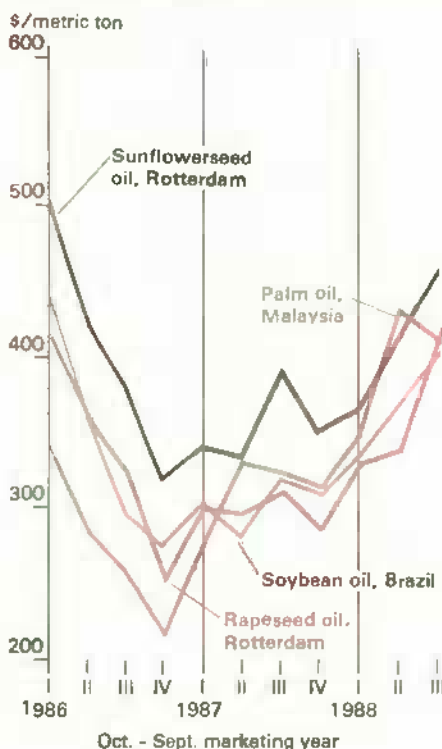
1981/82 - 1983/84 = 100



cent rise in total edible oil shipments). Rapeseed likely will account for 11 percent of all world trade in edible oils in 1988/89, up from 8 percent in 1983/84. World prices fell in response to supplies increasing more rapidly than demand.

The traditional destinations for rapeseed oil exports are the EC (exclusively in-traregional trade), North Africa, and India. The recent increase in world sup-

### Rapeseed Oil Price Is Among Lowest of World Vegetable Oils



plies and the fall in price opened new markets in China, the United States, and East Asia. The rise in U.S. imports is particularly striking. Imports of 200,000 tons are forecast in 1988/89, up from the yearly average of just 25,000 during 1983/84-1985/86.

Rapeseed oil has a significant share of total edible oil consumption in four of the five largest net oil import markets forecast for 1988/89. Of these markets—India, North Africa, China, Pakistan, and East Asia—only in Pakistan will rapeseed constitute less than 10 percent of total edible oil consumption.

### GRAS Status Boosts U.S. Consumption

U.S. importers took advantage of rapeseed oil's low price relative to other oils when the Food and Drug Administration in 1985 granted GRAS (Generally Regarded As Safe) status to low-erucic acid rapeseed oil for human consumption. Imports in 1984/85 tripled from 1983/84, from 5,000 to 15,000 tons. Rapeseed oil accounts for 16 percent of the U.S. import volume of edible vegetable oils forecast for 1988/89, behind coconut, palm, and palm kernel oil.

Rapeseed oil is used for salad and cooking oil and for baking and frying. One national retail brand of vegetable oil is exclusively low-erucic acid rapeseed oil. Rapeseed oil products are also on the market for commercial frying and salad oil. Use remains small, however; it is estimated at 2 percent this year and likely will rise to 3 percent in 1988/89.

Low erucic acid rapeseed oil has a relatively low saturated fat content, aiding marketing. The American Health Foundation of New York named the retail brand of rapeseed oil as its product of the year in 1987.

### Canada Is Main U.S. Supplier

Imports of low-erucic acid rapeseed oil are almost exclusively from Canada. However, U.S. vegetable oil processors reportedly intend to import some rapeseed oil from the EC this season because strong domestic and export demand for soybean oil and drought concerns have increased U.S. soybean oil prices.

Canada will remain the main U.S. source of edible rapeseed oil for the near term. Provisions of the Canada-U.S. Free Trade Agreement could influence future trade flows and U.S. use of Canadian rapeseed oil.

Rapeseed oil from Canada faces a relatively low 7.5-percent *ad valorem* duty upon entering the United States. Under the agreement, the duty will be eliminated over a 10-year period.

Oil from "double-low" varieties is known as canola oil in Canada. When the Free Trade Agreement is implemented, firms selling food products containing low erucic acid rapeseed oil in the United States can use either the low erucic acid designation or canola oil on product labels. Consumer attitudes toward rapeseed oil could be affected by a labeling change.

Some U.S. companies are establishing national rapeseed oil product lines. Future use will depend on consumer acceptance of the price of rapeseed oil relative to other oils, and the impact of health considerations on consumer demand. [Robert Cummings (202) 786-1826]



## Promising Outlook For U.S. Grapefruit Industry

Grapefruit is the second leading U.S. citrus crop (after oranges), with a farm value during the last 5 years ranging from \$185 million in 1982/83 to \$414 million in 1986/87. The 1986/87 crop value surpassed all other fruits except apples, grapes, and oranges.

The grapefruit industry has gradually recovered from freezes in Florida and Texas in the early 1980's. Although the volume of the 1986/87 crop was below the 1979/80 record, prices are higher and the farm value is substantially greater. The smaller crop since the freezes, combined with strong export demand, has pushed prices up.

### **Production Recovery Continuing**

The 1987/88 U.S. grapefruit crop is estimated at 68 million boxes, up 8 percent from 1986/87. This is the fourth consecutive increase since the December 1983 freeze. The Florida crop is estimated at 54 million boxes, 8 percent above the previous year and only slightly below the 1979/80 record.

The Texas crop is expected to be 3.8 million boxes, up 97 percent from 1986/87 and sharply above the 1983 freeze-reduced crop. The crops for Arizona and California, however, are forecast down from last year.

A tree survey conducted after the freezes shows that bearing acreage will continue to expand. The survey indicates that more trees are being planted per acre than in earlier stands. With continued improvement in technology and cultural practices, yield per acre is expected to climb.

The Florida Department of Citrus expects the State's grapefruit output to grow at least through the mid-1990's. Pink seedless production is expected to expand by 8.6 million boxes from 1987/88 to 1996/97.

The State's white seedless production is forecast to rise 2.7 million boxes over the same period; by contrast, seedy production could fall another 0.6 million boxes.

Grapefruit Returns (Equivalent On-Tree) by States

Season	Fla.	Calif.	Tex.	Ariz.	U.S.
			\$/box		
1979/80	3.31	1.82	2.59	1.49	3.01
1980/81	3.60	3.33	3.27	2.72	3.50
1981/82	2.09	1.85	1.89	1.01	1.99
1982/83	1.96	1.94	1.26	1.11	1.79
1983/84	2.72	2.83	2.03	2.54	2.68
1984/85	3.67	5.63	2/	4.18	4.01
1985/86	4.09	5.93	8.44	3.35	4.29
1986/87 1/	4.96	5.07	7.02	3.53	5.00

1/ Preliminary. 2/ Because of the severe freeze in December 1983, no commercial supplies were harvested for the 1984/85 crop.

Source: Agricultural Prices, NASS, USDA.

By 1996/97, Florida grapefruit production could easily exceed 60 million boxes, compared with the record of 54.8 million in 1979/80.

Following the freeze, Texas grapefruit disappeared completely from the commercial market in 1984/85. Since then, Texas has harvested more grapefruit every season, and the State should see dramatic gains in production both from recovering trees and from new plantings.

Texas has been planting improved varieties with a deep red interior that can be maintained throughout the season. First among these was the star ruby, which satisfied the color requirements but had serious drawbacks from the standpoint of tree health and production. Other strains such as henderson and more recently rio red, selected from older and more prolific red grapefruit lines of Texas, show promise.

Texas plantings after the December 1983 freeze totaled 5,000 acres by March 1, 1987 (trees 1-3 years old). Of these, 4,000 acres are red varieties including star ruby, henderson/ray, and rio red. This brings the Texas total area to 18,500 acres. Industry observers suggest that annual grapefruit production in Texas could return to 7-10 million boxes by the mid-1990's, which compares with the prefreeze level of 13.9 million boxes in 1982/83.

### **Per Capita Consumption Recovering**

Per capita grapefruit consumption reached a record 21.1 pounds (fresh weight equivalent) in 1978. Consumption was down to 12.8 pounds in 1984 after the 1983 freeze damage, but climbed back to 16.9 pounds in 1987.

Frozen concentrated grapefruit juice (FCGJ) will continue as a leading item, but chilled grapefruit juice (CGJ) will also gain in importance. Per capita FCGJ consumption reached a record 7.68 pounds in 1987. Some CGJ consumption includes FCGJ, because some FCGJ is reconstituted into CGJ.

Growing demand for convenience products will contribute to FCGJ and CGJ sales. Recent innovations in tetra brik aseptic packaging will add to CGJ convenience. Mixed fruit juices will further boost grapefruit juice consumption.

A downward trend is evident for canned single-strength juice. Consumption of canned grapefruit juice and other canned and jarred grapefruit products probably will remain insignificant.

### **Export Market Is Vigorous**

Even though rising production around the world has intensified competition, U.S. exports of fresh grapefruit have increased dramatically in the last 18 years. Japan replaced Canada as the leading U.S. export market after 1971/72. After Japan adopted a liberalized trade policy toward fresh grapefruit imports, total U.S. exports to all destinations almost doubled, going from 97,576 to 182,165 metric tons between 1970/71 and 1971/72.

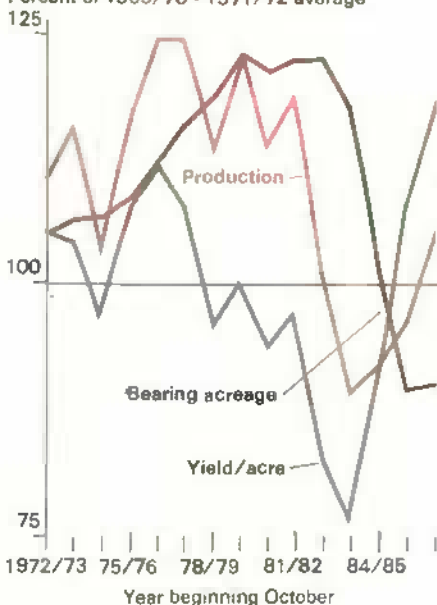
After the Japanese market boom, exports to all countries reached a record 347,316 metric tons in 1986/87, accounting for 15 percent of the U.S. grapefruit crop. Exports to Japan reached a record 195,257 metric tons in 1986/87, accounting for 56 percent of total grapefruit exports. The less expensive dollar and increased

promotion under USDA's Targeted Export Assistance Program contributed to the big shipments to Japan.

Exports to the EC rose from an average of 15,079 metric tons in 1970-72 to 77,463 in 1985-87. European consumers have developed a preference for U.S. pink grapefruit, such as ruby red, because of good quality and appearance. Promotional activities also contributed to the increase. France and the Netherlands

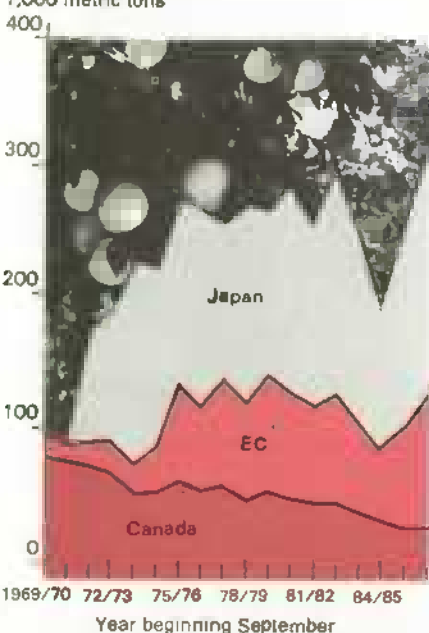
#### Grapefruit Production Recovers From Freezes as Yields Rise

Percent of 1969/70 - 1971/72 average



#### U.S. Grapefruit Exports to Japan Rising

1,000 metric tons



have been leading customers, accounting for 80 percent of U.S. grapefruit exports to the EC in 1986/87.

Exports of fresh grapefruit to Canada are down from the record 90,647 metric tons shipped in 1968/69. U.S. exports of fresh grapefruit to Canada were 28,368 metric tons in 1986/87. Canada now takes only 8 percent of total U.S. grapefruit exports, compared with 77 percent in 1969/70. U.S. grapefruit prospects are relatively weak in the Canadian market because of the appreciation of the U.S. dollar against the Canadian.

The outlook for fresh grapefruit exports is good. The United States and Japan recently signed a trade agreement; effective next April 1, tariffs on fresh grapefruit will be reduced from 25 percent in season and 12 percent off season to 15 percent in season and 10 percent off. Effective April 1, 1990, Japan will further reduce the tariff on grapefruit in season to 10 percent. The relatively inexpensive U.S. dollar will continue to enhance Japanese imports.

With cooperative promotional efforts and trade bargaining, Far Eastern markets appear promising, particularly Hong Kong, Taiwan, Korea, and Singapore. Prospects for higher personal income, increased population, and improved living standards in that part of the world are likely to enhance U.S. exports.

Even though U.S. grapefruit faces increasing competition in Western Europe from Mediterranean countries, the low dollar and the EC's preference for U.S. pink grapefruit are likely to keep the U.S. grapefruit market there relatively strong.

#### Grower Returns Strong

During the past several years, on-tree returns for grapefruit have been high, reflecting sharply reduced output, vigorous export demand, and higher prices. From 1970-72 to 1985-87, the on-tree return equivalent for U.S. grapefruit for all sales (fresh and processing) rose 134 percent.

On-tree returns for U.S. grapefruit for all uses averaged a record \$5 a box in 1986/87. Grapefruit used for fresh sales returned an average on-tree value of \$6.35 a box, while processing grapefruit yielded \$3.81. Fresh grapefruit consistently sold at a substantial premium over grapefruit for processing, partly influenced by expanding exports.

With only moderately increased production ahead and likely strong export demand, processors will aggressively compete with fresh fruit packers to secure enough fruit to satisfy processing needs. Prices are likely to remain relatively high for the next several years.

[Ben Huang (202) 786-1885]

#### Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the October *Agricultural Outlook* comes off press.

#### September

- 1 Egg Products
- 2 Poultry Slaughter
- Dairy Products
- 7 Celery
- 9 Vegetables
- 12 Crop Production
- 13 Turkey Hatchery
- 15 Milk Production
- 16 Cattle on Feed
- 20 Hop Stocks
- Catfish
- 23 Citrus Fruits
- Livestock Slaughter
- Eggs, Chickens, & Turkeys
- Cold Storage
- 27 Potatoes
- 29 Peanut Stocks & Processing
- Agricultural Prices
- 30 Grain Stocks
- Hogs & Pigs



## Farm Finance

### DROUGHT'S EFFECTS ON FARM INCOME

The drought of 1988 began as farm finances were recovering from the income and debt-restructuring problems of the early and middle 1980's. Agricultural debt has declined steadily since 1983. Land values rose last year following a 5-year skid, providing a stronger collateral base that could help the flow of funds into the sector. Net cash income established three successive records going into 1988.

Improvements made over the last few years in the sector's income and financial position, including lower debts and higher prices, are helping many producers endure the drought.

Cash income in 1988 may be steady to slightly higher, as drought assistance payments and gains for some farmers offset others' losses. Despite strength in the aggregate accounts, some individual farmers are being hit very hard by drought conditions.

Aiding this year's income prospects are improved prices for current and past years' crops. Forecasts prior to the drought's development had cash receipts rising \$2 to \$6 billion from 1987. Most of the growth was expected from crops, although livestock receipts were forecast near last year's record.

### Why Don't Cash Receipts Fall in a Drought?

Since droughts have a severe impact on current production, why don't cash receipts fall? Cash receipts grew nearly \$8 billion in the 1980 drought and are forecast to rise \$5-\$9 billion this year.

One reason is that the prices of drought-affected commodities tend to increase by more than production falls, raising the total value of the crop. Another reason is that marketing does not drop as much as production because stocks are sold to make up the harvest shortfall.

Economists say that the demand for farm commodities is inelastic, meaning that a 1-percent drop in production leads to greater than a 1-percent increase in price. For example, if the elasticity of demand for corn were -0.3, a 30-percent decline in corn production would double the price.

Some farmers may benefit from the higher prices—those in areas with adequate rainfall, those who irrigate, and those with large unsold stocks of previous years' crops.

However, higher cash receipts for the sector do not imply that all farmers are better off because of the drought. Many farmers will suffer large declines in cash receipts if their individual production falls by much more than prices rise. Farmers in drought-stricken areas without large stocks of unsold crops from previous years have little to fall back on.

### Income Adjustments Expected in 1988

With recent price increases more than offsetting projected production declines, crop receipts are forecast at \$66-\$68 billion, reversing 2 years of decline. Crop prices had begun to rise even before the drought. Sales from previous years' crops help prospects for crop receipts; inventories are an important source of revenue for drought-affected producers.

In contrast to the past 3 years, redemptions of Government-held stocks were anticipated to be slightly ahead of placements even before the drought's onset. Because of drought conditions, production estimates have been cut, grain

and soybean supply projections have tightened, and the value of net CCC redemptions is expected to increase sharply. Forecast at nearly \$2 billion, net redemptions may be over twice the previous high for the 1980's.

### Drought Impacts Vary Among Individual Farmers

Concealed behind the aggregate indicators for the farm sector are wide-ranging effects among individual farmers. A host of factors influence farm incomes and cash flows among regions, farm types, and individuals. Included among these are debt, predrought inventories, types of crops planted, planting dates, the frequency and timing of rains, access to irrigation facilities, and the use of crop insurance.

Consistent with recent droughts, this year's livestock receipts will probably be relatively stable. This year's smaller cattle herd appears to limit cullings, thus preventing substantial price weakening.

Also contributing to lower-than-expected cullings is the fact that the five largest cattle-producing States (Texas, Nebraska, Kansas, Colorado, and Oklahoma) have not been as hard hit by the drought as many other States. Strong first-half prices and projected record red meat and poultry production in 1988 are stabilizing this year's livestock earnings.

Other factors are lessening the effects of higher cash receipts on income growth. Calendar 1988 direct Federal payments, which were projected to decline \$3-\$4 billion prior to the drought, may fall an additional \$1.5-\$2 billion because of drought-induced higher prices.

Countering lower program payments is the recently passed Disaster Assistance Act. As much as three-quarters of this package may be used in calendar 1988. Even if the size of this program exceeds the initial estimate of \$3.9 billion, though, disaster relief payments are unlikely to eliminate the year-over-year average decline in direct Federal payments. (See the article on the Disaster Assistance Act in the "Agricultural Policy" section of this issue.)

Production expenses, led by higher feed and fertilizer costs, may rise \$2-\$5 billion from last year. Not all of these in-



## Half of U.S. Farms Are In Severe Drought Counties

Farms most likely to experience lower receipts because of the drought are concentrated in several regions. The accompanying table shows the proportion of farms in counties with severe or extreme drought by region.

Counties are classified by the Palmer Drought Severity Index. This index takes into account the regional history of items such as crop and pasture conditions, stream flow, and reservoir storage. Drought conditions are judged prolonged and/or severe relative to the norm established by this history.

However, even in a region severely hit by drought, wide variations in yields

have been observed; one farm may have lost nearly its whole crop, while a neighboring farm has yields close to normal.

According to the index, 51 percent of all farms and 61 percent of all cash grain farms are in counties severely affected by the drought. The drought is the most extensive in the Lake States, Corn Belt, and Pacific regions. In the Lake States, 94 percent of all farms are in severely affected counties; in the Corn Belt, 63 percent; and in the Pacific region, 71 percent.

The drought is widespread in prime agricultural regions. More than two-thirds of U.S. corn and soybeans are produced in the Lake and Corn Belt regions. Four out of five cash grain producers in these two regions are lo-

cated in severe or extreme drought counties. Farms in counties severely affected by the drought, as of July 9th, generated 40-60 percent of U.S. corn, wheat, soybean, and livestock sales in 1987.

July rainfall was beneficial to the Southeast, Delta, and Southern Plains. Along with parts of Nebraska, Kansas, and Missouri, these regions may find their farm incomes improving because of the drought's effect on farm prices in other regions. Less than 25 percent of the farms in the Northeast and the Delta regions are in drought counties.

Although not all farms in the severe drought counties face lower receipts, a high proportion of farmers in these regions will experience financial setbacks.

Share of Farms & Sales in Counties Suffering Severe or Extreme Drought, by Farm Production Regions 1/

	U.S.	North-east	Lake	Corn Belt	Northern Plains	South-east	Delta	Southern Plains	Mountain	Pacific	Appalachia
	Percent										
Share of farms											
All	51	22	94	63	38	30	24	2	48	71	72
Cash grain	61	35	98	73	41	22	14	2/	57	44	45
Beef, hog, sheep	43	29	90	52	75	34	29	2	53	86	75
Dairy	66	26	93	71	78	57	13	2/	63	66	78
Share of sales											
Corn	61	17	95	73	52	13	6	2	17	74	52
Wheat	41	27	99	46	35	9	4	2/	45	40	35
Soybeans	57	27	99	67	39	13	7	2	100	2/	39
Livestock	51	22	93	72	53	17	15	1	49	81	53

1/ Based on the Palmer Drought Severity Index as of July 9, 1988, and the 1987 Farm Cost and Returns Survey.  
2/ Insufficient observations to calculate index.

creased costs are attributable to the drought, but they limit prospective growth in 1988 net cash income.

At \$55 to \$60 billion, net cash income is projected near last year's high of \$57.1 billion. Sales of free stocks are playing a major role in supporting agriculture's cash position.

Net farm income, an accrual-based measure reflecting this year's lower production, may be reduced by as much as 8-12 percent. In response to production shortfalls—estimated at 37, 23, and 13 percent for corn, soybeans, and

## Inventory Values Swing Widely As Production Shifts

In USDA's aggregate farm income accounts, the value of the change in inventories is a major component of net farm income. This accrual-based concept measures the total value of production in a calendar year. Net farm income is more volatile than net cash income because swings in production result in changes in the value of inventories.

Crop marketing years overlap calendar years. Many of the sales occurring in a calendar year are from crops produced in past years. A drop in production results in a drawdown in inventory as current sales exceed current production. The value of the inventory reduction is estimated by multiplying the quantity

change by the average market price for the entire year.

As in past droughts, 1988 likely will experience a fall in the value of inventories, rather than an increase, and a large fall at that. With net inventory drawdowns subtracted from income, net farm income is forecast to drop 8-12 percent this year.

A return to near-normal yields in the year following a drought would lead to a reaccumulation of inventories and a consequent improvement in net farm income. The smaller acreage reduction requirements next year, in conjunction with normal yields, would lead to inventory buildups in calendar 1989. This replenishment of inventories would boost 1989 net farm income.

wheat, respectively—the value of inventory liquidations is forecast at nearly \$6 billion.

As a result, net farm income may decline from last year's \$46.3 billion to \$38-\$43 billion in 1988.

#### **Cash Income in 1989 May Decrease**

Adjustments to deficiency payments for the 1988/89 crop will be largest in calendar 1989. A nearly \$6-billion reduction from earlier expectations is likely in fiscal 1989 direct Federal payments. Of the total reduction, \$1.5-\$2 billion may be realized in calendar 1988. If \$3 billion of the 1988 Disaster Assistance Act disbursements occur by the year's end, next year's total Government payments will be about half of the calendar 1988 level.

Production expenses may increase substantially in 1989, judging from past droughts and from decreases in acreage reduction requirements for program crops next year. As in the second half of 1988, higher feed prices will affect 1989's costs. Higher prices for feeder cattle likely will help livestock incomes. For crops, bigger planted acreage will boost expenditures for seed, fertilizer, chemicals, and fuel.

Following the drought, next year's crop prices may remain higher, and crop production will increase. This would boost total cash receipts. However, it seems unlikely that revenue gains will compensate for reduced Federal supports and higher operating costs.

The 1980 drought provides a useful point of reference with respect to Government payments. Federal supports remained at approximately the same level in 1981 as in 1980, and cash expenses rose nearly 5 percent.

Current indications for 1989 suggest a more rapid run-up in production costs. Feed and feeder livestock costs may rise and so may the use of more expensive variable inputs in crop production. Thus,

1989's net cash income may fall more sharply than in 1981.

In comparison with net cash income, prospects for 1989 net farm income are more promising. This measure values production placed in inventories as well as sold—a likely occurrence next year, given current proposals to reduce set-aside requirements.

Following the 1980 and 1983 droughts, large inventory replenishments boosted net farm income from their drought-year levels, while leaving cash income unaffected. [Richard Kofl and Andrew Bernat (202) 786-1807]

### **Upcoming Economic Reports**

Summary Released	Title
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#### **September**

- |    |                           |
|----|---------------------------|
| 7  | Fruit & Tree Nuts         |
| 12 | World Ag. Supply & Demand |
| 14 | Sugar & Sweeteners        |
| 20 | Agricultural Outlook      |
| 21 | Tobacco                   |
| 23 | Agricultural Resources    |
| 26 | World Agriculture         |



### **General Economy**

#### **OUTLOOK THROUGH '89**

Although the drought has captured the attention of agricultural analysts, the non-farm sector of the economy continues to provide growing markets for farm products, accompanied by only moderate increases in wages and nonfarm prices.

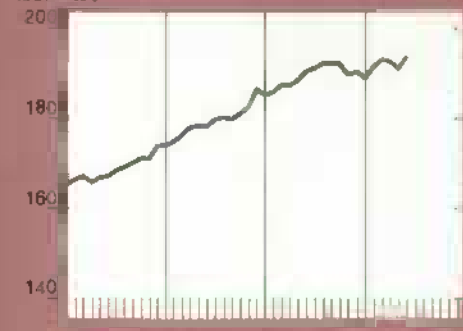
The general economy is growing briskly, with surging exports leading to the highest overall rate of capacity utilization in 8 years and the lowest rate of civilian unemployment in 14 years. This expansion is unusually long-lived; it is already in its 70th month. The last business cycle trough was in November 1982. This expansion's length is exceeded only by the 106-month upswing from 1961 to 1969.

The outlook for continued growth is bright. However, barring an unexpected drop in crude goods prices, including agricultural commodities, economic growth is likely to be accompanied by slightly higher inflation rates and slowly rising interest rates. While the drought is severely affecting agricultural production and prices, it probably will have no lasting impact on overall economic activity or prices.

# General Economic Indicators

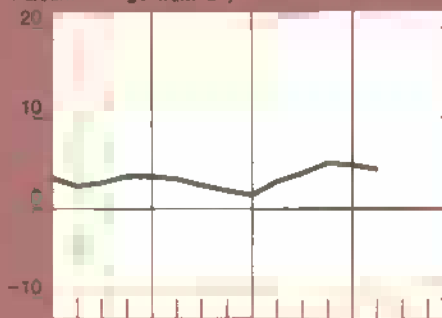
Composite leading economic indicators

1967 = 100



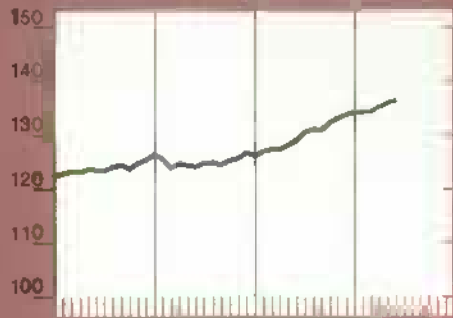
Gross national product<sup>1</sup>

Percent change from a year earlier



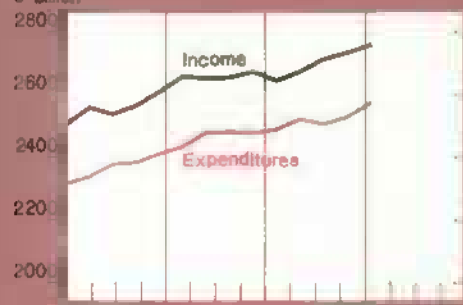
Industrial production

1977 = 100



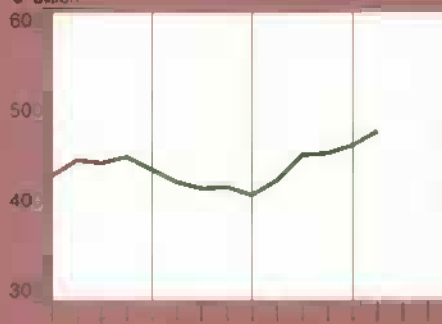
Disposable income and consumption expenditures<sup>2</sup>

\$ billion



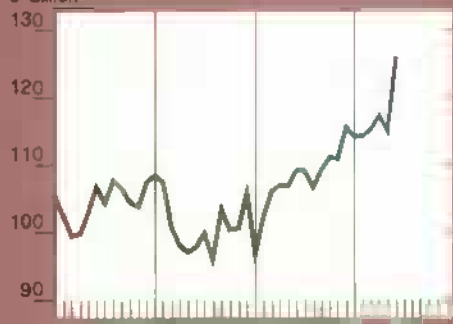
Nonresidential fixed investment<sup>2</sup>

\$ billion



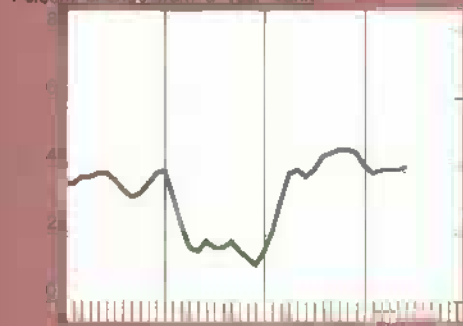
Manufacturers' durable goods orders<sup>3</sup>

\$ billion



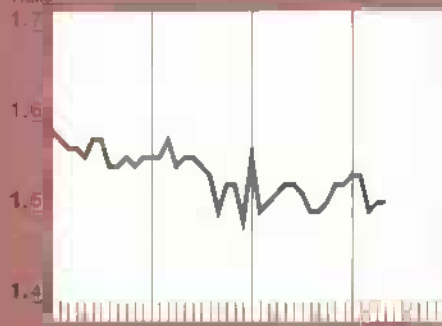
Consumer price index

Percent change from a year earlier



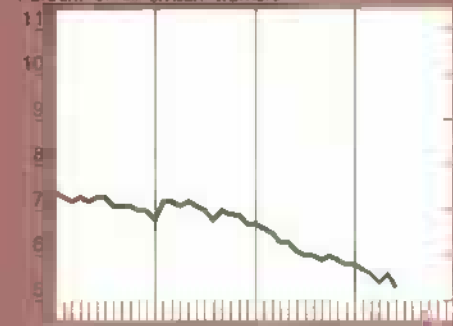
Inventory/sales<sup>4</sup>

Ratio



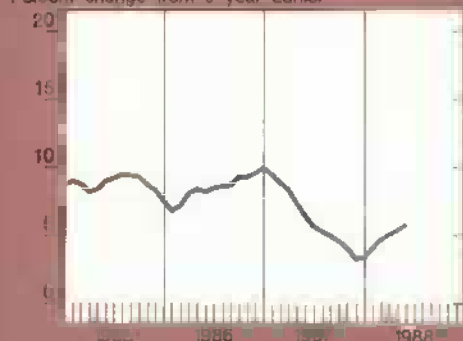
Unemployment rate<sup>5</sup>

Percent of all civilian workers



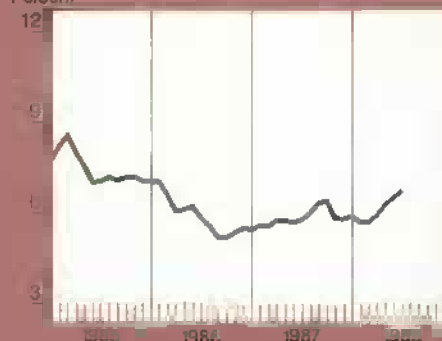
Money supply (M2)

Percent change from a year earlier



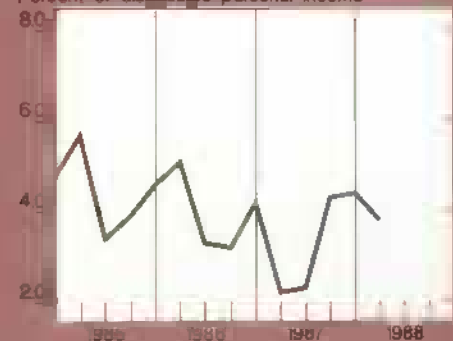
3-month Treasury bill rate

Percent



Savings rate<sup>6</sup>

Percent of disposable personal income



<sup>1</sup>Percent change from a year earlier in 1982 dollars. Seasonally adjusted annual rates. <sup>2</sup>Billions of 1982 dollars, seasonally adjusted at annual rates.

<sup>3</sup>Nominal dollars. <sup>4</sup>Manufacturing and trade, seasonally adjusted, based on 1982 dollars. <sup>5</sup>Seasonally adjusted.

<sup>6</sup>Calculated from disposition of personal income in 1982 dollars, seasonally adjusted at annual rates.

Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, and the Board of Governors of the Federal Reserve System.



## *Exports Are A Major Growth Stimulus*

Real GNP during the six quarters from the beginning of 1987 through the second quarter of 1988 grew 5.5 percent, compared with 2.5 percent from the middle of 1985 to the end of 1986.

While real GNP growth has accelerated, its composition has changed. Since the beginning of 1987, exports have grown 26 percent, business spending on plants and equipment 17 percent, and consumer spending 3.4 percent. In contrast, from mid-1985 to the end of 1986, consumer spending grew 4.5 percent while exports grew 5.5 percent and business investment spending dropped 7.3 percent.

Rising exports and slowing Federal Government spending on goods and services have helped the "twin deficits": the real net export and Federal budget deficits. From the middle of 1985 to the end of 1986, the net export deficit rose from \$102 billion to \$140 billion, and the fiscal 1986 Federal budget deficit stood at \$221 billion. By the second quarter of 1988, the real net export deficit had fallen to \$90 billion, while estimates of the expected fiscal 1988 budget deficit hover around \$150 billion.

## *Plant and Equipment Spending On the Rise*

The recovery in export industries was sparked largely by the decline in the value of the dollar; by mid-1988, it had fallen 42 percent from its peak in February 1985 (trade-weighted basis). Greater exports provided the impetus for rising plant and equipment spending, which by the second quarter of this year stood 13 percent above second-quarter 1987.

Plant and equipment spending affects the general economy in two ways. First, there is an immediate increase in employment and income in industries that build plants or produce investment goods, such as machinery and equipment. Employment in manufacturing, which includes the industries producing investment goods, grew 3 percent between June

1987 and June 1988, compared with declines in 1985 and 1986.

Higher employment usually increases total disposable income, providing a larger market for consumer goods, including food. Because gross weekly earnings in manufacturing are about 25 percent higher than average earnings across the whole economy, disposable income tends to rise even faster when manufacturing jobs are added.

Second, increasing plants and equipment tends to bolster the productive capacity of the industries purchasing the equipment, leading to greater productivity. Overall demand increases can then more easily be met without bottlenecks or substantial price increases.

Labor productivity in manufacturing rose 2.8 percent in 1987, even with rising employment. As a result, per-unit labor costs for the whole economy, a measure of the contribution of wage pressure to price increases, rose only 2 percent last year. Preliminary data for the first quarter of 1988 suggest continuing modest increases in labor costs, which typically account for two-thirds to three-quarters of product price.

## *Inflation Is Moderate*

With increases in unit labor costs modest, despite the booming economy and falling unemployment rates, inflation remains moderate. Consumer prices, excluding the volatile food and energy price factors, rose at a 4.7-percent annual rate in the first half of 1988, just above the 4.4-average rate since 1983.

Most of the volatility in consumer prices can be attributed to changing energy prices, which are influenced by changing crude oil prices. For example, when consumer prices rose only 1.1 percent in 1986, prices excluding food and energy rose 3.9 percent; consumer energy prices fell nearly 20 percent and crude oil prices were nearly halved.

Food spending accounts for about 16 percent of total consumer spending, and farm prices are a relatively small part of the cost of consumer food (although the exact share varies by product). Thus, the drought will have only a small impact on the overall CPI in 1988 and 1989.

Continued weakness in crude oil prices, which by midyear were about 25 percent lower than mid-1987, could easily offset the small gain in consumer food prices and leave the overall price index largely unchanged (see "Food and Marketing" in this issue).

The value of the dollar has risen 11 percent since the beginning of the year and has been in a relatively narrow range since mid-1987. As a result, import prices, which for nonoil goods grew about 9 percent in 1987, could stabilize, suggesting that the economy may already have seen most of the upward push that a falling dollar tends to exert on consumer prices.

## *Real Growth Will Stay Near 3 Percent*

The general economic picture appears bright for the next 12-18 months. Real growth likely will stay around 3 percent. Even though the fast growth in exports and plant and equipment spending probably cannot be sustained, they should be the driving force for continued expansion.

Export volume likely will continue to respond to previous declines in the value of the dollar, as more foreign importers discover and switch to competitive U.S. products. Faster economic growth abroad, especially in Japan, will help increase export demand.

Business investment spending should shift to more construction of new plants to meet higher demand levels. Further improvements in the twin deficits are likely. The resulting gains in employment and income will support demand for agricultural products.

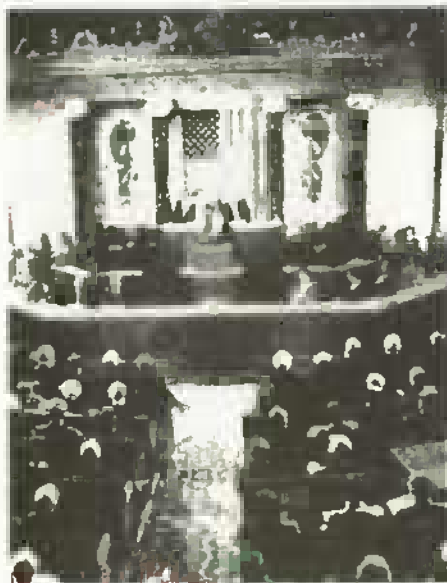
Moderate inflation—between 3.5 and 4.5 percent—likely will continue. A relatively stable dollar, weak oil prices, and productivity gains will help keep inflation in check despite continued growth, low unemployment, and increased capacity utilization. Consumer prices likely will be more volatile over the next year, with some of that volatility coming from food prices.

## Interest Rates: Stable to Rising Slightly

Interest rates are likely to be stable to rising slightly over the next 6 to 12 months. With real growth about 3 percent and inflation likely to remain moderate, a key factor in the interest rate outlook is the stance of the Federal Reserve. The recent hike in the discount rate, the rate the Federal Reserve charges financial institutions which borrow from it, underscores the Fed's announced intentions to forestall inflation by slowing growth.

Using the bank prime rate as a measure, interest rates are back up to about 10 percent, their level of 3 years ago. With the Federal Reserve willing to tighten the money supply to avoid higher inflation, continued rapid economic growth would put further upward pressure on interest rates. Should real growth slow slightly, interest rates could stabilize over the next 6 months.

The general economy next year probably will provide a stable environment in which agriculture can adjust to the repercussions of this year's drought. [Ralph M. Monaco (202) 786-1782]



## Resources

### HOW FARM PROGRAMS AFFECT EXCESS CAPACITY

In most years since 1940, U.S. farm production of some commodities has outpaced domestic and foreign demand. The sharp increase in crop yields and planted acres after World War II rapidly led to surplus supplies.

Three basic methods have been used to deal with these surpluses: (1) withhold

excess supplies from the market by storage, (2) dispose of commodities through noncommercial export channels, or (3) withdraw acreage from production through commodity programs.

Government programs since the end of World War II have combined all three methods. However, the amount of the farm sector's production capacity absorbed by Government programs has varied.

Commodities with storable excess supplies and with price supports or paid diversion programs have included wheat, corn, oats, barley, sorghum, soybeans, and cotton. Crops such as rye, rice, tobacco, peanuts, and dairy products have sometimes also registered surpluses.

ERS uses a method to measure that part of excess capacity which includes unsold farm output (excess supply), potential production from set-aside acres (excluding acreage idled for soil conservation purposes, such as CRP), and noncommercial exports.\* The measure accounts for these three components as a percentage of total potential agricultural production. Potential production includes actual production plus the potential production from acreage withdrawn and diverted as a result of Government programs.

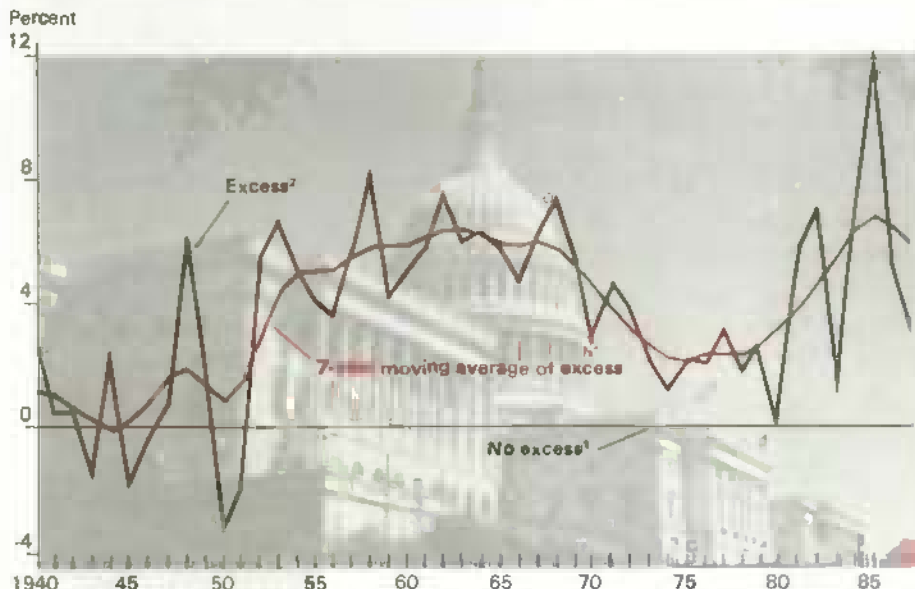
\*Further information on this method is in *Excess Capacity in U.S. Agriculture: An Economic Approach to Measurement* AER-580, by Dan Dvoskin, 1988.

#### Absorption of Excess Wheat Capacity

Item	Unit	1986	1987 1/
a. Harvested acres	Thous. acres	60,723	55,930
b. Average yield	Bu./acre	34.4	37.6
c. Production (a * b)	Mil. bu.	2,089	2,103
d. Imports	Mil. bu.	21	15
e. Total supply (c + d)	Mil. bu.	2,110	2,118
f. Domestic utilization	Mil. bu.	1,193	1,110
g. Total exports	Mil. bu.	1,004	1,550
h. Total disposition (f + g)	Mil. bu.	2,197	2,660
i. Excess supply (e - h) 2/	Mil. bu.	-87	-542
j. Noncommercial exports	Mil. bu.	533	742
k. Reduced program acres	Mil. acres	19.7	20.1
l. Effective reduced acres (.75 * k) 3/	Mil. acres	14.8	15.1
m. Potential yield on reduced acres (.80 * b) 4/	Bu./acre	27.5	30.1
n. Potential production from re- duced program acres (l * m)	Mil. bu.	407	454
o. Potential production absorbed by Government (i + j + n)	Mil. bu.	853	654
p. Capacity (o/(e + n) * 100)	Percent	33.8	25.4

1/ Preliminary. 2/ Change in stocks. 3/ Diversion of 100 acres tends to reduce program acreage by a net of 75 acres. 4/ Potential yield on reduced acres is taken as 80 percent of average yield.

## Share of Farm Capacity Accounted for by Government Programs Is Falling



<sup>1</sup>No excess capacity attributable to Government programs.

<sup>2</sup>Excess capacity attributable to Government programs as a percentage.

Acreage diversion programs introduced for selected crops during the 1950's reduced agricultural surpluses. Together, diverting some acreage and expanding noncommercial exports accounted for 5-6 percent of agricultural capacity during the late 1950's and 1960's.

Noncommercial export programs began in 1955 with the passage of P.L. 480. From 1955 to 1979, noncommercial exports averaged \$1 billion a year. Since the early 1980's, they have increased to \$2 billion a year.

In the early 1970's, commercial farm exports increased, and the farm sector's

capacity absorbed by Government programs declined to 2-3 percent. The drop in long-run excess capacity early in the decade was closely related to the sharp rise in exports and domestic demand, and it seemed that the problem of excess capacity had been solved.

When exports fell in the early 1980's, the capacity diverted by programs increased to a peak of 12 percent in 1985. Excess capacity declined in 1986 and 1987 as commercial exports rose. Continued high exports plus the current drought will further reduce excess capacity in 1988. [Klaus Alt and Dwight Gadsby (202) 786-1403]



## Food and Marketing

### DROUGHT IMPACT ON FOOD PRICES

In the first half of 1988, the Consumer Price Index for food averaged 3.2 percent above the first half of 1987. For the past 5 years, the CPI for food has risen about 3 percent per year, so first-half price changes—before the drought—were right on trend.

During the second half, the rate of increase is likely to be stronger; the drought is expected to add almost a percentage point to the rate of increase in the 1988 CPI for food. Food items most affected are meats, fats and oil products, cereal and bakery products, some vegetables for canning, and some fruits (see the August issue for a detailed discussion of the drought's effects on these commodities).

### Prices for Processed Fruit Follow World Prices Up

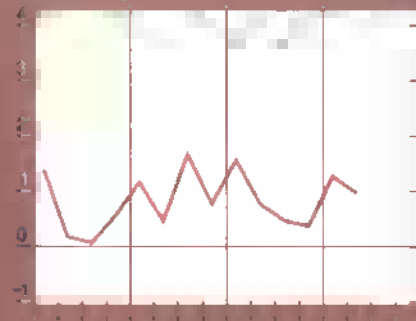
Among the food categories, the first-half CPI for processed fruit increased the most—9.6 percent. The rise was primarily because of higher prices for frozen concentrated orange juice (FCOJ). Higher domestic FCOJ prices were the result of strong increases in world market prices. Brazil, accused of dumping FCOJ on the world market in 1987, has raised prices over the past year.



# Food and Marketing Indicators

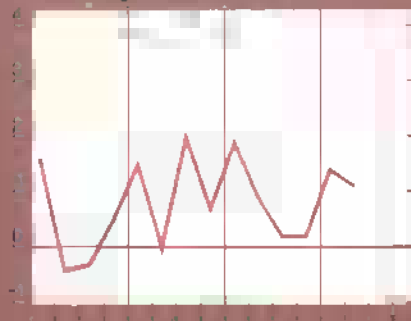
CPI: Total food<sup>o</sup>

Percent change



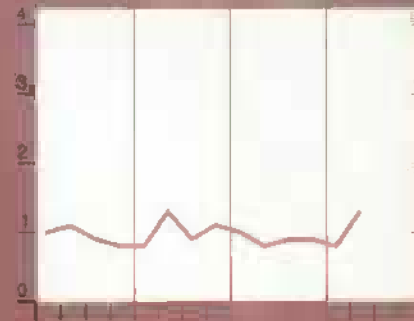
CPI: Food at home<sup>o</sup>

Percent change



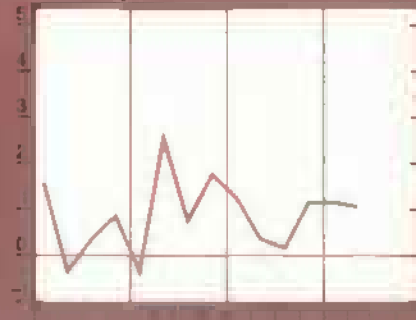
CPI: Food away from home<sup>o</sup>

Percent change



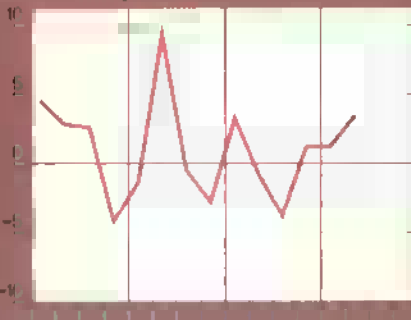
Retail cost of food<sup>1</sup>

Percent change



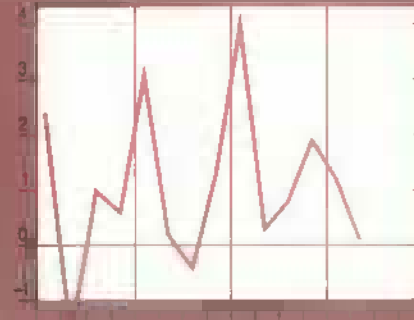
Farm value of food<sup>1</sup>

Percent change



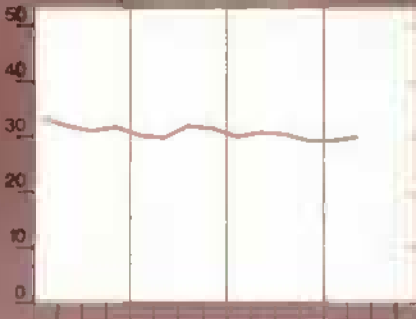
Farm-retail spread<sup>1</sup>

Percent change



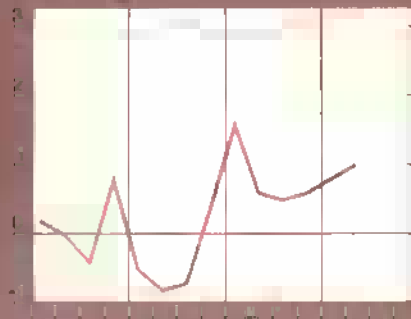
Farm value/retail cost<sup>1</sup>

Percent change



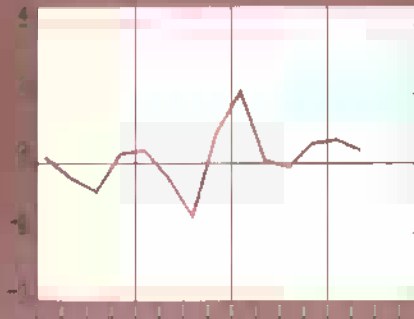
Food marketing cost index<sup>2</sup>

Percent change



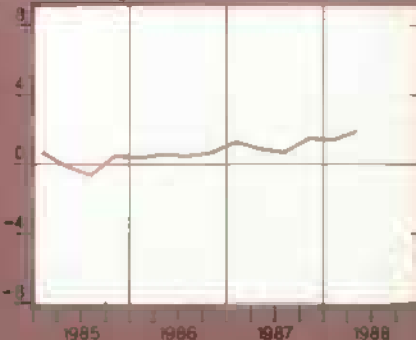
Index of hourly earnings<sup>3,4</sup>

Percent change



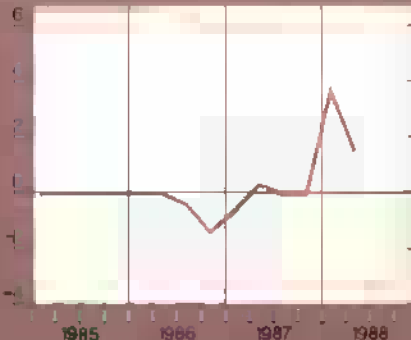
Index of packaging prices<sup>4</sup>

Percent change



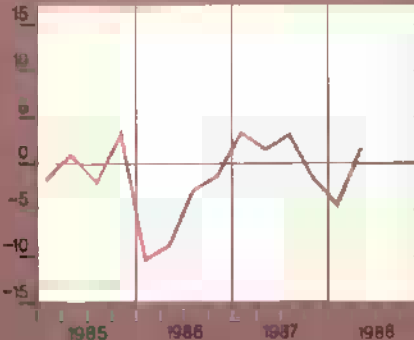
Index of rail freight rates<sup>4</sup>

Percent change



Index of energy rates<sup>4</sup>

Percent change



<sup>o</sup>CPI unadjusted. <sup>1</sup>Index based on market basket of farm foods. <sup>2</sup>Index of changes in labor, packaging, transportation, energy, and other marketing costs.

<sup>3</sup>In food retailing, wholesaling, and processing. <sup>4</sup>Component of food marketing cost index.

All series expressed as percentage change from preceding quarter, except for "Farm value/retail cost" chart.

The CPI for processed fruit is expected to be relatively stable during the second half. Stocks of most canned and frozen fruits probably will be ample, although somewhat lower than a year ago. The increase in the CPI for processed fruit in 1988 will be 10 to 12 percent above 1987.

#### ***Drought Pushing Up Some Fresh Vegetable Prices***

The CPI for fresh vegetables in the first half averaged 5.7 percent above the first half of 1987, mainly because of high lettuce prices in January and February. As of June, lettuce prices had receded and the CPI for fresh vegetables had retreated to nearly 6 percent below a year earlier.

However, for the rest of 1988, fresh vegetables prices are not expected to reach the seasonal low they might have before the drought. Although fresh vegetables grown for the commercial market are mostly irrigated and unhurt by the drought, during the summer some fresh vegetables sold in grocery stores are grown locally.

In drought areas, local vegetable crops likely are below normal and supplies will be drawn from nondrought areas, pushing average prices slightly higher. The CPI for fresh vegetables for the year is expected to average 4-6 percent above 1987.

#### ***Beef Prices Down During Second Half***

Red meat prices averaged higher during the first half of 1988. The CPI for beef and veal rose 5.7 percent, although the index for pork fell about 1 percent. Beef production decreased over the past year while demand remained fairly strong, boosting prices. Pork production increased, and supplies are above the record lows of first-half 1987. However, pork prices are higher.

During the second half, the CPI for red meats will average slightly below the first half. Beef and pork production will be slightly higher than expected before the drought. For all of 1988, the CPI for beef and veal is expected to average 3-5 percent above 1987, whereas the CPI for pork will be down 2-4 percent.

#### **Changes in Food Prices, 1986-88**

Consumer Price Index	Change from a year earlier		
	1986	1987	1988 forecast
	Percent		
All food	3.2	4.1	3 to 5
Food away from home	3.9	4.0	3 to 5
Food at home	2.9	4.3	3 to 5
Meat, poultry, & fish	4.3	6.4	1 to 3
Meats	3.2	7.5	0 to 2
Beef & veal	0.6	7.6	3 to 5
Pork	8.2	8.2	-2 to -4
Other meats	2.6	6.3	1 to 3
Poultry	7.5	-1.5	-1 to -3
Fish & seafood	9.2	10.6	5 to 7
Eggs	6.9	-5.9	3 to 5
Dairy products	0.2	2.5	1 to 3
Fats & oils	-2.2	1.5	3 to 5
Fruit & vegetables	0.9	8.8	5 to 7
Fresh fruit	2.1	11.3	5 to 7
Fresh vegetables	4.0	12.9	4 to 6
Processed fruit & veg.	-1.6	3.5	5 to 8
Processed fruit	-2.9	4.1	10 to 12
Processed veg.	-0.2	2.7	2 to 4
Sugar & sweets	3.2	1.8	1 to 3
Cereals & bakery products	2.8	3.5	5 to 7
Nonalcoholic beverages	5.9	-2.6	1 to 3
Other prepared foods	2.6	4.2	3 to 5

Source of historical data: Bureau of Labor Statistics, U.S. Department of Labor. Forecasts: ERS, USDA.

#### ***Poultry Prices Strong Through Summer***

Prices of poultry in the first half of this year averaged 2.4 percent below first-half 1987. By June, however, the CPI for poultry was 7.1 percent above a year earlier. Broiler production for the first half was 7 percent above a year earlier. Even with higher feed prices resulting from the drought, prices for chicken have been strong enough to keep production profitable.

Higher grocery store prices for chicken reflect vigorous demand among fast food chains. When fast food chains run a promotion or introduce a new item, they ensure that supplies will be ample to cover the promotion period by contracting ahead.

This means that chicken supplies available to other food outlets are smaller and prices rise sharply, as they have this summer. Poultry prices are expected to ease in the fourth quarter. The CPI for poultry for all of 1988 is expected to decrease 1-3 percent from 1987.

Egg prices averaged below a year earlier through the first half of the year because

of lackluster consumer demand. Egg production was down about 1 percent through the first half and likely will decline further. Higher feed costs will force producers to cut production, so prices are expected to climb in the second half.

#### ***Processing and Marketing Costs Push Up Food Prices***

The CPI for all food in 1988 is expected to rise 3-5 percent above 1987. Despite the drought, most of the increase will come from a 3-5 percent increase in costs for processing and marketing foods.

The farm value of food, that portion of the consumer food dollar going to farmers, is expected to rise 2-4 percent above 1987. Higher farm prices for cattle, broilers, grains, and oilseeds will increase the farm value. But, the rise will be tempered by lower hog and milk prices. [Ralph Parlett (202) 786-1870]



## Agricultural Policy

### LEGISLATION ON NEW USES FOR FARM PRODUCTS

To help create new sources of demand for farm products, lawmakers recently introduced a number of bills to fund development of innovative industrial and commercial products from certain crops and other agricultural materials. House and Senate bills proposed in the past 18 months would stimulate public and private research on commodity-based products and their uses.

Promoting scientific efforts to expand demand for farm products is not new. However, most farm research legislation in the past 100 years has funded research to increase productivity, not demand. The Agricultural Adjustment Act of 1938 created four regional research facilities to find new industrial uses for surplus farm commodities. The New Orleans facility, for example, concentrated on new uses for cotton products, sweet-potatoes, and peanuts.

The concept of regional centers serving diverse agricultural areas was incorporated into companion bills proposed recently by Sen. Kent Conrad and Rep. Timothy Penny.

The Agricultural Research Commercialization bill (S. 2413 and H.R. 4651) would establish 10 to 12 regional centers providing financial assistance to private

### Agricultural Research Slowly Shifts Direction

Congress created the Federal and State agricultural experiment station system in 1887 to promote "scientific investigation and experiment respecting the principles and applications of agricultural science." For almost 80 years, the major thrust of agricultural research was to expand the farm sector's productive capacity.

By the 1960's, however, Federal expenditures for research began to shift from production and marketing to natural resources, nutrition, food safety, and rural development.

In title XIV of the Food and Agriculture Act of 1977, Congress outlined broad areas in which new research initiatives were needed—for example, the development of new crops, new or improved food processing techniques (such as food irradiation), and value-added technologies. The bill authorized funds to discover and promote alternative fuel sources, including agricultural and forestry programs.

companies to develop new, nonfood, non-feed commercial uses for farm and forest products. The assistance could be used for projects from prototype testing and market development to factory construction and worker training.

The bills are based on the recommendation made to Congress by USDA's New Farm and Forest Products Task Force that an autonomous, nonprofit corporation be established to promote new farm and forest products.

The legislation would require companies applying for assistance to commit their own resources, not just use Government funding. Companies would also have to show that they have access to private business enterprises that can provide additional resources, but that adequate private-sector funding is not available. Proposals demonstrating that matching funds are available from the public or private sector would have priority. Projects would have to be self-sustaining.

#### *Plastics Could Be Made From Corn*

Introduced by Sen. John Glenn, the Agricultural Commodity-Based Plastics

The 1981 Food and Agriculture Act supported these and other programs, and encouraged research on aquaculture, rangelands, and permanent pastures. Lawmakers also provided renewed support for productivity research in response to concerns about stagnant commodity yields.

The 1985 Food Security Act added a subtitle linking productivity research to resource conservation. It emphasized "legume-crop rotation, the use of green manure, animal manures, and municipal wastes... and biological methods of weed, disease, and insect control."

The 1985 act did not specifically include productivity enhancement projects, although one area—biotechnology—received strong support. Congress authorized \$20 million for biotechnology research in fiscal 1985. The act included provisions for risk assessment and coordination of regulations on biotechnology. Congress directed the Secretary of Agriculture to consider the consequences of biotechnology for small farms.

Development bill (S. 2298) would provide incentives for private development of technology to produce biodegradable plastic products from agricultural commodities.

The combination of starch made from corn and other grains with conventional plastic resins can produce a wide variety of products, including plastic packaging, bags, milk jugs, meat trays, diaper liners, fast food containers, and pharmaceutical packaging.

These cornstarch-based plastics could replace 30-45 percent of the low-density polyethylene plastics used. Biodegradable plastics could use approximately 112 million bushels of corn per year.

The Glenn bill calls for the Government to buy biodegradable plastic products to encourage development and adoption of the technology. S. 2298 directs the General Services Administration, the purchasing agency for the Federal Government, to make biodegradable plastic products available to Government agen-



## Congress Offers Some Aid to Producers Hurt by Drought

In response to farm losses from the drought, Congress passed the Disaster Assistance Act of 1988, which the President signed into law August 11 (P.L. 100-387). The \$3.9-billion act compensates crop farmers for production losses and provides feed assistance to certain livestock and poultry producers. Highlights of the complex provisions follow.

Emergency assistance is available to livestock producers who suffer a substantial loss of feed normally produced on the farm. Livestock assistance benefits are limited to \$50,000 per person annually. Any livestock producer with annual gross revenues over \$2.5 million is not eligible for assistance. For covered producers the act provides that the Secretary will implement one or more of the following programs:

- donating CCC-owned feed grains to producers financially unable to purchase feed or to participate in other programs;
- selling CCC-owned feed grains to other livestock producers at 75 percent of the county loan rate;
- reimbursing livestock producers for not more than 50 percent of the cost of feed purchased to make up their crop loss during the emergency;
- reimbursing transportation and handling expenses (not to exceed 50 percent) incurred by producers who donate or sell feed grains to livestock producers suffering crop loss;
- providing hay and forage transportation assistance, not to exceed 50 percent of the transporting cost from a place beyond the producer's normal trade area;
- providing livestock transportation assistance not to exceed 50 percent of the cost of transporting. Nor is it to exceed the lesser of \$24 per head or the local cost of additional feed needed during the emergency.

The dairy price support will not drop the expected 50 cents per cwt on January 1, 1989. The support rate will increase 50

Base Levels for Disaster Payment Rates

Crop	Payment base level
Wheat, feed grains, cotton, & rice (1988 program participants)	Target price
Wheat, feed grains, cotton, & rice (nonparticipants)	Basic county loan rate or comparable price
Peanuts	Quota or additional price support level
Tobacco	National average loan rate or, if none, market price
Sugarbeets & sugarcane	Determined by Secretary, but no less than normal return to producers under the 1988 price-support program
Soybeans & nonprogram crops	Average market price of past 5 years dropping the high and low years

cents per cwt from April 1, 1989 to June 30, 1989.

Disaster assistance payments will be available to crop producers who suffer losses greater than 35 percent of program or historical yields. A producer's total payment will be 65 percent of the payment yield less the actual yield, multiplied by the disaster payment rate.

Payment rates differ depending on the commodity, the amount of crop loss, and whether producers participated in 1988 Federal commodity programs. For production losses between 35 and 75 percent, the payment rate is 65 percent of the applicable base level. For losses over 75 percent, the payment rate is 90 percent of the applicable level. The base levels are delineated in the accompanying table.

Disaster payments for crops are limited to \$100,000 per person. Combined benefits from livestock and crop payments cannot exceed \$100,000. Any person with gross revenues over \$2 million annually is not eligible for crop payments.

On production losses up to 35 percent, advance deficiency payments for 1988 wheat, feed grains, upland cotton, and rice are not required to be refunded. Required refunds for 1988 do not have to be repaid before July 31, 1989.

The Secretary must provide prevented-planting credit for nonparticipants and for growers of nonprogram crops who were prevented from planting because of drought, hail, or excessive moisture (within specified limits).

Producers must obtain multiperil crop insurance for the 1989 crop of the commodity for which they are seeking disaster payments or forgiveness of advanced deficiency payments if their losses exceed 65 percent. Other exemptions also apply.

For the 1989 crop year, and possibly for 1990, the Secretary shall permit producers to plant soybeans or sunflowers on 10-25 percent of the commodity's permitted acreage (crop acreage base less reduced or diverted acreage) without affecting the calculation of each producer's historical base.

The Secretary is to guarantee loans made in rural areas to assist businesses hurt by drought, hail, or excessive moisture in 1988.

Programs that already exist are helping drought-stricken farmers in other ways:

- Emergency haying and grazing are approved in 2,202 counties in 40 States. Farmers in these counties may harvest hay until August 31 on cropland idled under the Conservation Reserve Program.
- Federal crop insurance is available for most crops in all counties. About one-fifth of insurable acreage was covered in 1987.
- Low-interest disaster loans are available from the Farmers Home Administration in declared emergency areas. As of August 17, 794 counties in 12 States were designated for such loans.

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cies. To cover the differences in cost between conventional and biodegradable products, the Government would provide \$20 million for each of the next 3 years.

The 1989 Rural Development, Agriculture, and Related Agencies Appropriation bill (H.R. 4784) includes \$40,000 for a special grant for applied research to produce plastics from corn. The grant would be matched by State and local funds.

Unlike the Glenn bill, H.R. 4784 provides for research directed toward nonbiodegradable plastics, for uses such as substitutes for polyvinyl chloride (PVC) piping. The bill, which has passed both the House and the Senate, also contains a \$133,000 grant for research on other new uses for agricultural products.

The Senate version of the 1989 appropriations bill includes an amendment by Glenn that would provide at least \$15 million to USDA's Agricultural Research Service for the nonfood uses research program originally authorized in the 1985 Food Security Act. The amendment would not increase USDA's budget, but would rechannel existing funds into new products research.

#### ***Some Bills Stress Direct Commercial Link***

A number of bills proposed over the past 18 months would fund private and public research on multiple new uses for agricul-

tural commodities. Sen. Tom Harkin sponsored S. 970, the Alternative Agricultural Products Research bill. The bill was subsequently included as an amendment to the Biotechnology Competitiveness bill (S. 1966). It authorizes \$75 million in each of the next 20 years to develop new industrial and commercial products from agricultural commodities.

The House Agriculture Committee has also introduced its own research bill. The Agricultural Research bill (H.R. 5056), introduced by Rep. E. (Kika) de la Garza, is more comprehensive than the Harkin proposal. Title I, for example, would establish competitive grants for research to explore alternative production methods. Title III would create a research program to measure microbiological and chemical agents in or affecting agricultural products.

Like the Harkin bill, H.R. 5056 would promote cooperative public and private development of new uses, applications technologies, and processes for agricultural commodities. The bill also seeks to improve economic development in rural areas through the introduction of new products for farm commodities.

H.R. 5056 would provide a direct link to potential commercial markets by requiring all research proposals applying for funds to include a U.S. company willing to pay at least 20 percent of the research project's total costs. The company would have to produce the new product commercially under licensing or royalty agreements.

#### ***Debate on Agricultural Research Will Continue***

Bipartisan interest in agricultural research suggests that Congressional debate will continue during the remainder of the 100th Congress, probably centering on the Harkin and de la Garza bills. Although both promote new agricultural products, the Harkin bill stipulates that at least half of the appropriated funds be allocated to biotechnological research.

The Conrad bill, which provides for commercialization of new industrial products, has been discussed as an amendment to the proposed Rural Economy bill (S. 1729). In markup of S. 1729, the appropriation for the Conrad amendment was reduced from \$100 million to \$30 million in fiscal 1989.

In fiscal 1987, \$25 million of the \$510-million budget of the Agricultural Research Service was spent on research to develop nonfood uses for agricultural commodities instead of the traditional area of production research. But the Glenn amendment to the Agriculture Appropriations bill suggests that Congress will mandate a stronger role for Federal research in developing new uses for farm commodities. [Kathryn L. Lipton (202) 786-1696]



## Drought Deals Blow To Economies of Farm Export Counties

Expansions and contractions in agricultural trade affect rural regions unevenly. Counties that specialize in major export crops (corn, wheat, soybeans, cotton, and rice) benefit most when exports increase, and they bear the brunt of adjustment when exports decline.

The five major export crops were 50 percent or more of total agricultural sales in 419 nonmetro counties in 1982. These counties are called export-dependent. The five export-oriented commodities accounted for two-thirds of farm sales in export-dependent counties, compared with about one-fourth of total U.S. farm sales.

The booms and busts are greatest in the 173 counties where county income depends on the farm sector and the farm sector depends on exports. In farm-dependent counties, 20 percent or more of labor and proprietor income, including nonfarm income, is from farming.

The value of U.S. agricultural exports increased 9 percent in calendar 1987, reversing a 5-year downward trend, and it is expected to increase even more in calendar 1988. The five major export commodities accounted for over 80 percent of the 1981-86 decline and for 57 percent of the 1986-87 rise.

Cotton export value doubled from 1986 to 1987, corn export value was up one-fourth, wheat and soybean sales were stable, and rice exports fell slightly. Because of lower U.S. prices, the volume of foreign sales of corn and wheat rose far more than their value in 1987. Nevertheless, these five commodities made up 43 percent of the \$28.6 billion of agricultural goods that the United States exported in calendar 1987.

## Financial Stress Recurs

Financial conditions for farmers in export-dependent counties have improved as exports have grown since 1986. However, the drought this year impedes the financial recovery of many farmers in farm export counties.

Lower commodity prices, rising real interest rates, and falling asset values in the 1980's brought many farmers who specialize in export crops to the brink of insolvency. Foreign demand fell because of global economic malaise, growth in farm production of competitors, and appreciation of the U.S. dollar. Export sales, which had increased 600 percent from 1970 to 1981, dropped 40 percent in the next 5 years.

As exports fell in the early 1980's, farmland values decreased by far more in counties where farmers depend on exports than in counties with diversified agriculture. Because of greater-than-average losses of asset value in export-dependent counties, more of those farms (14.2 percent) were in a highly stressed financial condition than in all U.S. counties (10.5 percent) in 1986. This suggests that, prior to the onset of the drought, farm operators in export-dependent farming areas were already more likely to be under financial stress than those in areas that are more economically diverse or that were destined for better weather in midsummer 1988.

## Export Slowdown Hurt Local Nonfarm Economies

Export-dependent counties did not keep pace with economic growth in the rest of the United States as agricultural exports fell during the early 1980's. In counties where farmers depend on exports, the lag in general economic growth during the early 1980's is illustrated by the following characteristics:

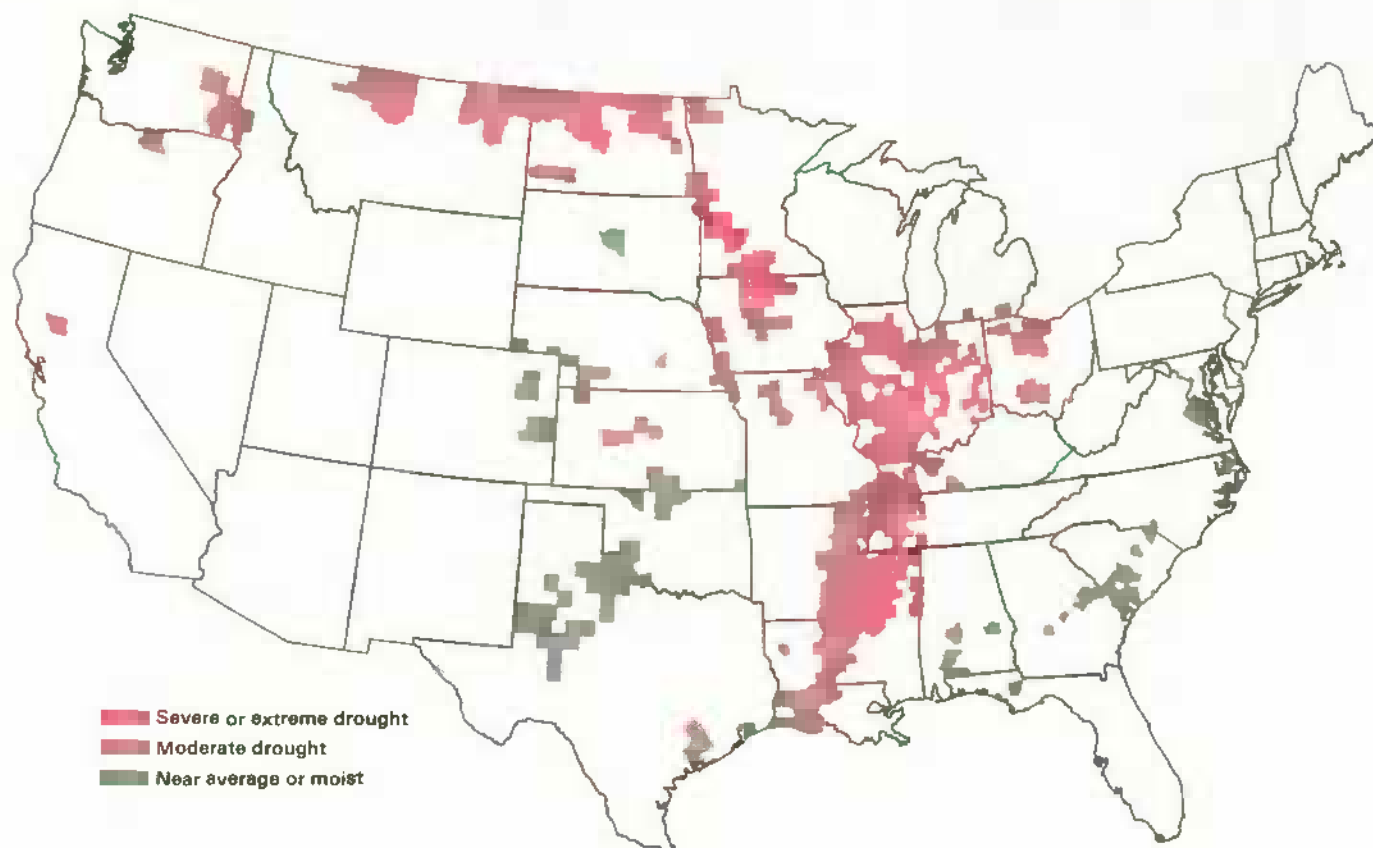
- Population, which grew at an annual average of 0.6 percent (about one-third of the general nonmetro growth rate) in the 1970's, fell 0.4 percent in 1985, whereas population in other rural counties gained 0.5 percent that year.
- Income growth, which almost equaled the national growth rate from the early to late 1970's, dropped 20 percent below the national rate from the late 1970's to the early 1980's.
- Employment growth, which averaged 60 percent or more of the nonmetro growth rate during the 1970's, declined to about one-fourth the nonmetro rate in the early 1980's.
- Total farm-linked employment, which is historically slow-growing in rural areas, comprised one-third of all employment and almost one-half in counties dependent on both farming and exports, compared with about one-fifth in the United States.

The drop in farm exports reached bottom in 1986. By then, exports provided less income to the farm and nonfarm economies in these counties, and Government payments provided more. Government payments for each of four com-



## Drought Hits Some Farm Export Counties Harder Than Others

As of July 9, 1988.



modity programs (feed grains, wheat, cotton, and rice) reached records in the mid-1980's.

Payments for the four commodity programs in export-dependent counties were more than twice the average for all non-metro counties. Government payments in 1984 provided about one-half of farm income in export counties, compared with one-fourth in all nonmetro counties.

### *Drought Can Offset Gains From Exports*

Counties in which farmers depend heavily on exports are vulnerable not only to swings in international trade but also to unusual weather patterns. Together, export dependence, farm dependence, and drought have dealt some rural areas repeated blows.

Of the 419 export-dependent counties, 179 had severe or extreme drought according to the July 9 Palmer Drought Index (a measure of prolonged and abnormal moisture deficiency or excess). Eighty-five of the export-dependent drought counties are also highly dependent on farming for their general economic health. Thus, the drought hit their economies in an especially vulnerable area.

The average farm in drought-stricken export counties is large; it represents an investment in land and buildings more than 40 percent greater than the U.S. average. Nearly one-half of the farm operators work full time on the farm, well above the U.S. average, mainly because in many of these counties few off-farm jobs are available.

Almost half of the 153,000 farms in the export drought counties have farm sales of at least \$40,000, and these medium- and large-size farms account for 90 percent of the counties' total agricultural sales. Only one-third of farms in export counties and one-fourth of farms in export drought counties had farm sales below \$10,000 in 1982, compared with almost one-half for the United States. Less than one-fourth of farms in counties dependent on both farming and exports were these very small farms.

Farm sales in export-dependent drought counties are 70 percent crops, primarily corn (30 percent), wheat (11 percent), and soybeans (22 percent). The other 30 percent of sales are livestock, mainly cattle and hogs. These counties generate almost one-fourth of all U.S. corn and soybean sales, 15 percent of U.S. wheat sales, and 15 percent of U.S. hog sales.

In export counties that have suffered severe or extreme drought, farm-related employment accounts for almost one-third of total employment, half of which is directly in farm

# Population & Agriculture-Related Employment in Export-Dependent Counties

		Nonmetro counties				
Item	Unit	U.S.	All	Export-dependent 1/	Export & farm 2/	Export & drought 3/
<b>COUNTY EMPLOYMENT &amp; POPULATION</b>						
Population, 1986	Thousand	241,033	56,625	9,527	2,134	4,322
Average county	Number	77,828	23,762	22,736	12,337	24,146
Counties losing population 1980-83	Percent	27.5	30.2	52.0	64.7	67.0
1983-86	Percent	47.1	54.8	70.2	86.1	74.9
Total employment, 1984	Thousand	100,240	19,645	3,395	722	84
<b>SHARE OF TOTAL EMPLOYMENT</b>						
Agriculture-related employment, total	Percent	19.5	31.3	32.4	46.0	33.7
Farm production sector	Percent	4.1	13.6	15.8	29.9	20.6
Direct agribusiness sectors, total	Percent	3.7	6.9	6.2	7.9	4.1
Farm inputs	Percent	.4	1.1	1.5	2.7	2.0
Farm processing & marketing	Percent	3.2	5.8	4.7	5.2	2.1
Indirect agribusiness sector	Percent	2.2	2.2	2.3	1.6	1.0
Food & fiber wholesaling & retailing sector	Percent	9.5	8.7	8.1	6.7	8.1

1/ Export-dependent counties are those in which 50 percent or more of total farm sales was derived from corn, wheat, soybeans, cotton, and rice in 1982. 2/ Export and farm counties are export-dependent counties in which 20 percent or more of labor and proprietor income was derived from farming in 1975-79. 3/ Export and drought counties are export-dependent counties with severe or extreme drought based on the Palmer Drought Index from the U.S. Department of Commerce, week ending July 9, 1988.

Source: U.S. Department of Commerce, Bureau of the Census, and Bureau of Economic Analysis.

production. Three-fourths of the drought counties lost population in 1983-86, compared with half of the nonmetro counties nationwide.

## Drought Problems Concentrated In Three Export Regions

Three-fourths of the export-dependent drought counties are in three farm production regions: the Corn Belt (94 counties), the Lake States (20 counties), and the Northern Plains (18 counties). The average farm in the Corn Belt counties is one-third the size of the average farm in the Northern Plains. However, the average per-acre value of land and buildings for Corn Belt farms is nearly four times that for Northern Plains farms, partly because the value of sales per acre in the Corn Belt is 4.5 times that in the Northern Plains.

In the Corn Belt, two-thirds of farms sales in the export-dependent drought counties normally are corn and soybeans (20 percent of U.S. corn sales and 17 percent of U.S. soybean sales), with the remainder primarily cattle and hogs.

In the Northern Plains export drought counties, one-half of total farm sales are from wheat alone (5.6 percent of the \$7.7 billion U.S. wheat sales). Twenty-five percent of sales are from other crops, and 15 percent from livestock. In the Lake States counties, corn, wheat, and soybeans together account for 56 percent of farm sales, and livestock (mainly cattle, hogs, and dairy) for 35 percent.

The Corn Belt drought counties have an average population 30 percent higher than the nonmetro average, whereas average

population in the Northern Plains is 50 percent lower. Fewer Corn Belt counties lost population in the mid-1980's than in the early 1980's, but the population declined 1.2 percent (36,500 people) over 3 years, whereas nonmetro counties overall gained 1.3 percent. The Northern Plains counties, which gained 9,900 people in 1980-83, lost nearly 4,600 residents (-2.2 percent) in 1983-86.

## Drought Impedes Farm Financial Recovery In Export Counties

Some export-dependent counties will be more adversely affected by the drought than others. Farms in export-dependent areas that are having a good crop year, particularly those located in the winter wheat-growing areas of the southern and central Great Plains, will have higher farm incomes because of the higher prices. Some farmers can draw down their inventories to offset substantial yield reductions and maintain adequate cash flow this year.

Many farms in the severe and extreme drought export-dependent areas will have crop shortfalls. This will mean lower sales and lower cash incomes for farmers and reduced incomes for nonfarm businesses in these counties. Cattle and dairy operations that normally depend on summer forage face increased feeding costs. However, recently passed Federal drought assistance will ameliorate the financial hardship of the drought. Even so, the drought will reduce the incomes of many farmers this year, and ultimately the incomes of nonfarm businesses in drought-stricken farm-dependent counties. [Judith Sommer (202) 786-1525]

# Agriculture in Export-Dependent Counties

		Nonmetro counties				
Item	Unit	U.S.	All	Export- dependent 1/	Export & farm 2/	Export & drought 3/
Total counties	Number	3,077	2,443	419	173	179
Total farms, 1982	Number	2,240,976	1,681,892	301,182	123,469	153,351
Acres per farm, 1982	Number	440	504	477	596	462
Land & buildings per acre, 1982	\$	786	680	1,011	951	1,067
Farm sales per farm, 1982	\$	58,738	58,860	67,560	81,149	70,086
Share of U.S. sales of 4/						
All agricultural commodities	Percent	100	70.8	15.5	7.6	8.1
All crops	Percent	100	66.1	24.4	11.8	12.1
Corn	Percent	100	76.5	33.7	16.7	23.6
Wheat	Percent	100	86.5	31.6	19.1	15.2
Soybeans	Percent	100	79.7	45.3	20.1	22.7
Cotton	Percent	100	64.6	38.4	12.4	2.3
Rice	Percent	100	74.2	70.5	35.8	5.1
All livestock	Percent	100	74.0	7.6	4.0	4.6
Cattle	Percent	100	81.8	7.5	4.2	4.1
Hogs	Percent	100	83.3	22.1	11.2	14.7
Poultry	Percent	100	68.8	1.5	0.7	1.0
Dairy	Percent	100	60.8	2.9	1.1	1.8
Share of sales from 4/						
Export-oriented crops						
Corn	Percent	10.2	10.7	22.2	22.3	29.4
Wheat	Percent	5.9	6.9	12.0	14.7	10.9
Soybeans	Percent	7.9	8.5	23.0	20.6	21.8
Cotton	Percent	2.4	2.2	6.0	3.9	.7
Rice 5/	Percent	.9	1.0	3.9	4.0	.5
Total	Percent	27.2	29.2	67.0	65.6	63.3
Other crops	Percent	19.6	14.7	6.5	6.8	5.4
Total livestock	Percent	52.0	54.6	25.5	27.0	29.2
Cattle	Percent	23.6	27.3	11.4	12.9	11.9
Hogs	Percent	7.3	8.6	10.4	10.7	13.2
Poultry	Percent	6.8	6.6	.7	.6	.8
Dairy	Percent	12.0	10.3	2.2	1.7	2.6
Share of farms with sales of						
Less than \$10,000	Percent	48.9	46.3	32.7	22.8	27.5
\$10,000-\$39,999	Percent	22.7	23.5	25.8	26.2	26.8
\$40,000-\$99,999	Percent	14.9	16.0	21.3	26.0	24.3
\$100,000-\$249,999	Percent	9.6	10.3	15.0	18.9	16.5
\$250,000 or more	Percent	3.9	3.8	5.1	6.1	4.8
Share of sales derived from						
farms with sales of						
Less than \$10,000	Percent	2.7	2.6	1.8	1.1	1.5
\$10,000-\$39,999	Percent	8.2	8.6	8.5	7.5	8.7
\$40,000-\$99,999	Percent	16.4	17.7	20.7	21.2	22.8
\$100,000-\$249,999	Percent	24.8	26.3	33.8	35.5	35.8
\$250,000 or more	Percent	47.2	44.0	34.9	34.6	31.0
Farm operators reporting						
No off-farm work	Percent	38.5	39.8	43.4	48.6	44.6
200+ days off-farm work	Percent	34.6	32.3	27.2	20.0	25.3

1/ Export-dependent counties had 50 percent or more of total farm sales from corn, wheat, soybeans, cotton, and rice in 1982. 2/ Export and farm counties are export-dependent counties in which 20 percent or more of the counties' labor and proprietor income was derived from farming in 1975-79. 3/ Export and drought counties are export-dependent counties with severe or extreme drought based on the Palmer Drought Index from the U.S. Department of Commerce, week ending July 9, 1988. 4/ Percentages do not add to 100 because of disclosure deletion in a few counties for selected data items. 5/ Estimated value of rice.



# Statistical Indicators

## Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1987		1988					1989	
	IV	Annual	I	II	III F	IV F	Annual F	I F	Annual F
Prices received by farmers (1977=100)	129	127	130	134	143	142	137	--	--
Livestock & products	144	146	148	149	150	150	149	--	--
Crops	110	106	108	119	135	135	124	--	--
Prices paid by farmers, (1977=100)									
Production items	150	147	153	155	153	153	153	--	--
Commodities & services, interest, taxes, & wages	165	162	165	168	169	168	168	--	--
Cash receipts (\$ bil) 1/	138	138	153	154	156	136	143-148	--	--
Livestock (\$ bil)	80	76	76	76	83	77	77-79	--	--
Crops (\$ bil)	58	62	58	78	73	59	66-68	--	--
Market basket (1982-84=100)									
Retail cost	112	112	114	115	--	--	--	--	--
Farm value	95	97	96	99	--	--	--	--	--
Spread	122	119	123	123	--	--	--	--	--
Farm value/retail cost (%)	30	30	30	30	--	--	--	--	--
Retail prices (1982-84=100)									
Food	114	114	116	117	119	119	118	--	--
At home	112	112	114	115	117	117	116	--	--
Away-from home	119	117	120	121	122	123	121	--	--
Agricultural exports (\$ bil) 2/	8.5	27.9	9.4	8.6	7.0	9.0	33.5	8.5	--
Agricultural imports (\$ bil) 2/	5.2	20.6	5.7	5.1	5.0	5.0	21.0	5.5	--
Commercial production									
Red meat (mil lb)	10,096	38,442	9,665	9,682	10,080	10,043	39,470	9,563	37,885
Poultry (mil lb)	5,112	19,772	4,986	5,205	5,235	5,110	20,536	5,015	21,265
Eggs (mil doz)	1,479	5,797	1,464	1,415	1,400	1,430	5,709	1,420	5,655
Milk (bil lb)	34.7	142.5	36.1	37.8	35.4	34.3	143.6	35.3	142.2
Consumption, per capita									
Red meat and poultry (lb)	56.2	212.7	53.5	54.3	55.3	56.6	220.1	52.9	215.9
Corn beginning stocks (mil bu) 3/	4,881.7	4,881.7	9,768.5	7,635.2	5,833.0	--	--	--	--
Corn use (mil bu) 3/	2,177.9	7,409.8	2,134.2	1,804.3	--	--	--	--	--
Prices 4/									
Choice steers--Omaha (\$/cwt)	64.31	64.60	68.28	72.81	65-69	66-72	68-71	67-73	71-77
Barrows and gilts--7 mths. (\$/cwt)	43.51	51.69	44.74	45.90	42-46	37-43	42-45	42-48	44-50
Broilers--12-city (cts/lb)	42.5	47.4	45.4	55.6	61-65	50-56	53-56	50-56	51-57
Eggs--NY Gr. A large (cts/doz)	59.2	61.6	55.0	53.3	70-74	70-76	62-65	69-75	70-76
Milk--all at plant (\$/cwt)	12.83	12.51	12.23	11.43	11.65-11.95	12.45-13.05	11.90-12.20	12.10-12.90	11.95-12.75
Wheat--Kansas City HRW (\$/bu)	2.86	2.72	3.20	3.38	--	--	--	--	--
Corn--Chicago (\$/bu)	1.74	1.64	1.95	2.29	--	--	--	--	--
Soybeans--Chicago (\$/bu)	5.36	5.19	6.14	7.01	--	--	--	--	--
Cotton--Avg. spot mkt. (cts/lb)	63.7	64.3	59.1	61.5	--	--	--	--	--
	1980	1981	1982	1983 R	1984 R	1985 R	1986 R	1987 R	1988 F
Gross cash income (\$ bil)	143.3	146.0	150.6	150.4	155.2	156.8	152.0	160.4	163-168
Gross cash expenses (\$ bil)	109.1	113.2	112.5	113.5	116.6	110.2	100.6	103.3	106-109
Net cash income (\$ bil)	34.2	32.8	38.1	36.9	38.7	46.6	51.4	57.1	55-60
Net farm income (\$ bil)	16.1	26.9	23.5	12.7	32.2	32.3	37.5	46.3	38-43
Farm real estate values (1977=100) 5/	145	158	157	148	146	128	112	103	106

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 4/ Simple averages. 5/ Nominal values as of February 1. F = forecast. R = revised. -- = not available.

# U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1987			1988	
	1985 R	1986 R	1987 R	II R	III R	IV R	I R	II P
\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	4,014.9	4,240.3	4,526.7	4,484.2	4,568.0	4,662.8	4,724.5	4,806.9
Personal consumption expenditures	2,629.0	2,807.5	3,012.1	2,992.2	3,058.2	3,076.3	3,128.1	3,186.8
Durable goods	372.2	406.5	421.9	420.5	441.4	422.0	437.8	446.9
Nondurable goods	911.2	943.6	997.9	995.3	1,006.6	1,012.4	1,016.2	1,030.3
Clothing & shoes	156.4	167.0	178.2	176.8	180.4	181.2	180.5	182.5
Food & beverages	471.6	501.0	526.4	525.3	528.4	530.9	535.9	542.4
Services	1,345.6	1,457.3	1,592.3	1,576.4	1,610.2	1,641.9	1,674.1	1,709.6
Gross private domestic investment	643.1	665.9	712.9	698.5	702.8	764.9	763.4	756.5
Fixed investment	631.8	650.4	673.7	665.8	688.3	692.9	698.1	713.5
Change in business inventories	11.3	15.5	39.2	32.7	14.5	72.0	65.3	43.0
Net exports of goods & services	-78.0	-104.4	-123.0	-122.2	-125.2	-125.7	-112.1	-90.6
Government purchases of goods & services	820.8	871.2	924.7	915.7	932.2	947.3	945.2	954.2
1982 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	3,618.7	3,721.7	3,847.0	3,823.0	3,865.3	3,923.0	3,956.1	3,986.3
Personal consumption expenditures	2,354.8	2,455.2	2,521.0	2,516.6	2,545.2	2,531.7	2,559.8	2,574.2
Durable goods	355.1	385.0	390.9	391.3	406.5	387.6	401.1	408.1
Nondurable goods	847.4	879.5	890.5	889.8	891.9	890.5	892.7	888.2
Clothing & shoes	147.2	157.6	160.5	158.2	162.9	160.3	159.6	155.7
Food & beverages	435.5	448.0	450.4	450.1	449.4	449.2	451.4	449.9
Services	1,152.3	1,190.7	1,239.5	1,235.5	1,246.8	1,253.6	1,265.9	1,278.0
Gross private domestic investment	637.0	643.5	674.8	660.1	667.9	724.7	728.9	725.0
Fixed investment	628.7	640.2	644.7	632.3	654.9	657.6	662.9	680.0
Change in business inventories	9.1	15.4	34.4	27.8	13.0	67.1	66.0	45.0
Net exports of goods & services	-104.3	-137.5	-128.9	-126.0	-130.7	-126.0	-109.0	-90.1
Government purchases of goods & services	731.2	760.5	780.2	772.2	782.9	792.6	776.4	777.2
GNP implicit price deflator % change	3.0	2.7	3.3	3.5	3.1	2.4	1.7	4.1
Disposable personal income (\$ bil)	2,838.7	3,019.6	3,209.7	3,154.1	3,224.9	3,315.8	3,375.6	3,416.5
Disposable per. income (1982 \$ bil)	2,542.8	2,640.9	2,686.3	2,652.8	2,683.9	2,728.9	2,762.3	2,759.8
Per capita disposable per. income (\$)	11,861	12,496	13,157	12,947	13,204	13,543	13,760	13,900
Per capita dis. per. income (1982 \$)	10,625	10,929	11,012	10,889	10,989	11,145	11,260	11,228
U.S. population, total, incl. military abroad (mil)	239.3	241.6	243.9	243.6	244.2	244.8	245.4	245.8
Civilian population (mil)	237.0	239.4	241.7	241.4	242.0	242.6	243.1	243.6
	Annual			1987		1988		
	1985	1986	1987	June	Mar	Apr	May	June
Monthly data seasonally adjusted								
Industrial production (1977=100)	123.7	125.1	129.8	129.1	134.7	135.4	136.1	136.6
Leading economic indicators (1967=100)	168.6	179.3	189.9	190.5	192.4	192.9	191.3	194.0
Civilian employment (mil. persons)	107.2	109.6	112.4	112.3	114.1	114.7	114.2	115.0
Civilian unemployment rate (%)	7.2	7.0	6.2	6.1	5.6	5.4	5.6	5.3
Personal income (\$ bil annual rate)	3,325.3	3,531.1	3,780.0	3,747.1	3,985.9	3,995.8	4,013.9	4,041.8
Money stock-M2 (daily avg) (\$ bil) 1/	2,562.6	2,807.8	2,901.1	2,851.7	2,967.4	2,991.7	3,003.1	3,016.8
Three-month Treasury bill rate (%)	7.48	5.98	5.82	5.69	5.69	5.92	6.27	6.50
AAA corporate bond yield (Moody's) (%)	11.37	9.02	9.38	9.32	9.39	9.67	9.90	9.86
Housing starts (thou) 2/	1,742	1,805	1,621	1,583	1,529	1,584	1,384	1,454
Auto sales at retail, total (mil)	11.0	11.4	10.3	10.4	10.6	10.5	10.4	11.0
Business inventory/sales ratio	1.55	1.54	1.51	1.50	1.50	1.51	1.51	--
Sales of all retail stores (\$ bil)	115.0	121.2	125.5	126.5	132.3	131.7	132.0 P	132.8
Nondurable goods stores (\$ bil)	71.8	73.9	76.9	79.6	81.8	81.3	81.8 P	82.2
Food stores (\$ bil)	23.7	24.6	25.3	26.4	27.0	26.9	27.1 P	27.0
Eating & drinking places (\$ bil)	11.1	12.1	12.7	12.3	12.7	12.6	12.7 P	12.7
Apparel & accessory stores (\$ bil)	6.2	6.7	7.1	6.6	6.7	6.6	6.7 P	6.8

1/ Annual data as of December of the year listed. 2/ Private, including farm. R = revised. P = preliminary. -- = not available.

Information contact: James Malley (202) 786-1782.

Table 3.—Foreign Economic Growth, Inflation, &amp; Export Earnings

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986	1987 P	1988 F	1989 F
Annual percent change												
Total foreign												
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.7	2.9	3.1	2.9
CPI	10.2	14.0	16.9	15.6	14.4	18.4	22.5	21.6	11.4	16.1	29.3	36.8
Export earnings	27.5	14.6	22.2	-2.7	-7.0	-2.6	5.6	1.7	11.9	18.4	11.7	8.3
Developed less U.S.												
Real GNP	4.8	3.1	2.4	1.4	1.1	1.9	3.4	3.3	2.4	2.9	3.2	2.6
CPI	8.4	9.4	10.9	9.6	8.0	6.0	5.1	4.7	2.7	2.7	3.2	3.4
Export earnings	23.9	14.9	17.0	-3.3	-4.3	-0.5	6.3	4.6	19.4	17.6	11.0	8.1
Centrally planned												
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.9	3.9	3.2	3.2	3.2
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	7.3	6.7	7.7	8.0
Latin America												
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.3	3.6	3.7	2.3	0.1	2.4
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.1	179.4	86.1	136.8	271.9	350.9
Export earnings	28.1	12.8	30.1	5.3	-10.0	-1.0	6.7	-5.9	-13.5	8.7	8.0	6.5
Africa & Middle East												
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	1.1	0.0	-1.2	1.2	1.5	2.7
CPI	8.7	16.4	24.6	17.3	12.9	16.7	19.4	11.2	12.0	13.2	16.9	14.4
Export earnings	49.6	43.2	37.9	-9.2	-19.7	-17.5	-7.0	-6.7	-14.8	10.6	10.3	7.6
Asia												
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	5.8	7.1	5.7
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.2	4.4	5.3	6.7	7.0
Export earnings	30.1	19.4	27.8	6.8	-0.3	3.4	13.7	-1.2	5.8	28.2	12.9	11.8

P = preliminary. F = forecast.

Information contact: Timothy Baxter (202) 786-1706.

## Farm Prices

Table 4.—Indexes of Prices Received &amp; Paid by Farmers, U.S. Average

	Annual			1987	1988					
	1985	1986	1987	July	Feb	Mar	Apr	May	June R	July P
1977=100										
Prices received										
All farm products	128	123	127	129	130	130	130	134	137	142
All crops	120	107	106	108	109	110	111	117	127	136
Food grains	133	109	103	92	120	118	119	125	138	142
Feed grains & hay	122	98	85	86	96	97	100	105	127	147
Feed grains	122	96	81	82	93	94	95	98	126	147
Cotton	93	91	98	113	94	95	98	97	101	100
Tobacco	153	138	129	127	134	134	126	126	126	126
Oil-bearing crops	84	77	79	81	89	91	95	103	117	127
Fruit, all	180	170	182	196	166	163	160	195	179	163
Fresh market 1/	192	178	193	210	174	170	166	206	191	173
Commercial vegetables	129	130	144	133	129	136	132	115	116	130
Fresh market	122	123	147	133	127	136	131	108	110	126
Potatoes & dry beans	124	114	127	166	94	102	105	118	113	148
Livestock & products	136	138	146	148	149	148	148	151	147	147
Meat animals	142	145	163	170	172	171	172	176	168	163
Dairy products	131	129	129	124	127	123	119	117	116	117
Poultry & eggs	119	128	107	103	95	101	98	106	114	136
Prices paid										
Commodities & services,										
interest, taxes, & wage rates	163	159	162	164	--	--	168	--	--	172
Production items	151	144	147	148	--	--	155	--	--	160
Feed	116	108	103	105	--	--	112	--	--	147
Feeder livestock	154	153	179	182	--	--	197	--	--	180
Seed	153	148	148	149	--	--	150	--	--	150
Fertilizer	135	124	118	117	--	--	132	--	--	132
Agricultural chemicals	128	127	124	123	--	--	127	--	--	127
Fuels & energy	201	162	161	165	--	--	163	--	--	166
Farm & motor supplies	146	144	144	137	--	--	147	--	--	147
Autos & trucks	193	198	208	212	--	--	215	--	--	216
Tractors & self-propelled machinery	178	174	174	174	--	--	179	--	--	179
Other machinery	183	184	185	189	--	--	199	--	--	199
Building & fencing	136	136	137	135	--	--	137	--	--	138
Farm services & cash rent	150	145	146	146	--	--	150	--	--	150
Interest payable per acre on farm real estate debt	237	219	207	207	--	--	193	--	--	193
Taxes payable per acre on farm real estate	133	134	136	136	--	--	138	--	--	138
Wage rates (seasonally adjusted)	154	160	167	173	--	--	174	--	--	174
Production items, interest, taxes, & wage rates	157	150	152	154	--	--	159	--	--	162
Ratio, prices received to prices paid 2/	79	77	78	79	79	79	77	80	82	83
Prices received (1910-14=100)	585	561	578	588	592	593	594	614	627	649
Prices paid, etc. (parity index) (1910-14=100)	1,120	1,096	1,115	1,125	--	--	1,158	--	--	1,182
Parity ratio (1910-14=100) 2/	52	51	52	52	--	--	51	--	--	55

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data is quarterly and will be published in January, April, July, and October. R = revised. P = preliminary. -- = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.



Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1988						
	1985	1986	1987	July	Feb	Mar	Apr	May	June R	July P
<b>Crops</b>										
All wheat (\$/bu)	3.20	2.71	2.55	2.32	2.79	2.74	2.79	2.99	3.36	3.46
Rice, rough (\$/cwt)	7.85	5.04	4.49	3.49	8.97	8.79	8.33	7.71	7.29	7.35
Corn (\$/bu)	2.49	1.96	1.56	1.60	1.83	1.86	1.88	1.95	2.41	2.89
Sorghum (\$/cwt)	3.97	3.11	2.56	2.66	2.88	2.92	2.94	2.91	4.13	4.77
All hay, baled (\$/ton)	69.93	61.64	62.91	61.80	65.50	66.20	72.90	80.90	76.80	83.10
Soybeans (\$/bu)	5.42	5.00	5.07	5.25	5.97	6.06	6.40	6.99	8.14	8.87
Cotton, Upland (cts/lb)	56.1	54.8	59.4	68.3	56.8	57.7	59.4	58.9	61.2	60.7
Potatoes (\$/cwt)	3.92	5.03	4.47	6.96	3.73	4.00	4.09	4.66	4.23	5.57
Lettuce (\$/cwt)	10.90	11.90	14.70	16.80	11.10	13.80	9.33	7.89	10.70	7.54
Tomatoes (\$/cwt)	24.10	25.10	26.00	20.50	19.40	28.60	29.90	22.60	24.80	34.10
Onions (\$/cwt)	9.08	10.90	12.50	14.90	13.80	12.50	15.10	9.10	8.49	11.50
Dry edible beans (\$/cwt)	17.60	19.10	14.90	19.40	14.40	16.30	16.90	18.40	21.00	27.30
Apples for fresh use (cts/lb)	14.7	19.8	19.4	25.3	13.3	12.8	11.3	11.1	10.9	19.7
Pears for fresh use (\$/ton)	349.00	369.00	225.00	270.00	212.00	227.00	249.00	404.00	526.00	410.00
Oranges, all uses (\$/box) 2/	7.41	4.42	4.55	6.29	6.24	5.99	6.42	7.87	7.76	4.11
Grapefruit, all uses (\$/box) 2/	4.01	4.29	5.00	5.58	5.25	4.86	4.50	3.96	2.89	4.74
<b>Livestock</b>										
Beef cattle (\$/cwt)	54.00	52.80	61.40	61.10	67.40	68.30	69.00	69.30	65.00	63.60
Calves (\$/cwt)	62.40	60.90	78.10	80.30	92.60	93.50	93.20	93.40	84.90	85.00
Hogs (\$/cwt)	43.90	50.10	50.90	59.60	45.80	42.20	41.90	46.30	47.10	44.10
Lambs (\$/cwt)	68.10	69.10	77.90	78.70	80.40	80.20	74.80	72.60	60.20	60.20
All milk, sold to plants (\$/cwt)	12.75	12.50	12.54	12.00	12.30	11.90	11.60	11.40	11.30	11.40
Milk, manuf. grade (\$/cwt)	11.72	11.46	11.37	11.00	11.00	10.70	10.60	10.40	10.30	10.40
Broilers (cts/lb)	30.1	34.5	28.5	27.6	25.7	27.5	28.0	33.5	36.7	42.1
Eggs (cts/doz) 3/	57.4	61.2	53.8	50.3	46.9	50.8	45.5	43.1	45.7	57.8
Turkeys (cts/lb)	47.2	44.4	34.2	33.5	29.0	28.2	28.4	29.7	31.6	39.4
Wool (cts/lb) 4/	63.3	66.8	91.7	87.0	93.3	118.0	153.0	165.0	161.0	133.0

1/ Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years.  
 2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail.  
 4/ Average local market price, excluding incentive payments. R = revised. P = preliminary.

Information contact: National Agricultural Statistics Service (202) 447-5446.

## Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1987			1988					
	1987	June	Nov	Dec	Jan 1982-84=100	Feb	Mar	Apr	May	June
Consumer price index, all items	113.6	113.5	115.4	115.4	115.7	116.0	116.5	117.1	117.5	118.0
Consumer price index, less food	113.6	113.5	115.7	115.5	115.7	116.0	116.6	117.2	117.6	118.1
<b>All food</b>	113.5	113.8	114.2	114.7	115.7	115.7	115.9	116.6	117.0	117.6
Food away from home	117.0	116.8	118.6	118.9	119.3	119.7	120.2	120.7	121.0	121.5
Food at home	111.9	112.6	112.1	112.8	114.1	113.9	113.9	114.6	115.1	115.8
Meats 1/	109.6	110.6	111.1	110.4	110.1	110.2	110.9	110.8	111.7	113.8
Beef & veal	106.3	108.3	108.6	108.5	107.7	108.5	109.8	110.5	111.7	114.1
Pork	115.9	116.6	115.5	113.1	113.4	112.3	112.6	111.4	111.7	114.6
Poultry	112.6	112.1	107.9	107.8	108.9	108.4	109.1	110.2	114.0	120.1
Fish	129.9	128.3	132.3	133.3	137.2	137.0	136.0	139.3	136.1	136.0
Eggs	91.5	84.1	93.9	85.5	90.1	85.5	87.9	85.0	81.8	83.6
Dairy products 2/	105.9	105.5	106.9	106.7	107.4	107.3	107.2	107.1	107.4	107.2
Fats & oils 3/	108.1	107.8	108.0	107.7	108.5	109.5	110.3	110.3	111.2	111.5
Fresh fruit	132.0	140.6	125.8	126.3	130.7	132.6	133.8	139.9	146.6	143.6
Processed fruit	110.6	111.3	111.6	112.3	115.1	118.0	119.4	122.1	121.8	123.5
Fresh vegetables	121.6	129.2	121.2	140.2	143.9	133.7	125.6	127.5	124.5	121.8
Potatoes	116.0	136.4	100.6	103.8	104.6	106.2	108.5	111.2	114.7	122.2
Processed vegetables	107.1	107.3	107.3	107.3	107.2	107.6	107.9	108.4	108.6	110.0
Cereals & bakery products	114.8	114.7	116.2	116.8	118.1	118.7	118.9	119.8	120.3	120.8
Sugar & sweets	111.0	111.2	111.4	111.0	112.2	112.2	112.6	112.3	112.5	113.3
Beverages, nonalcoholic	107.5	106.8	105.0	104.8	106.9	107.7	107.7	107.8	107.5	107.1
<b>Apparel commodities less footwear</b>	109.6	107.9	115.0	111.7	109.0	108.8	113.7	116.6	115.7	113.6
Footwear	105.1	105.6	108.0	107.2	106.1	105.8	107.3	109.4	109.7	109.2
Tobacco & smoking products	133.6	132.4	136.5	137.0	140.8	142.2	142.8	142.9	143.2	143.6
Beverages, alcoholic	114.1	114.0	115.4	115.4	115.8	116.8	117.4	118.0	118.2	118.7

1/ Beef, veal, lamb, pork, and processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ralph Parlett (202) 786-1870.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1987	1988					
	1985	1986	1987	June	Jan	Feb R	Mar	Apr	May	June
	1982=100									
Finished goods 1/	104.7	103.2	105.4	105.5	106.3	106.1	106.2	106.9	107.5	107.9
Consumer foods	104.6	107.2	109.5	110.6	110.5	109.4	110.0	110.2	111.3	112.5
Fresh fruit	108.1	112.9	111.4	112.3	109.2	106.9	104.2	102.7	103.6	112.2
Fresh & dried vegetables	99.4	97.8	103.8	109.8	126.3	96.4	96.3	98.4	96.7	90.6
Dried fruit	88.7	91.9	95.0	93.7	97.8	97.8	97.8	97.9	97.9	99.2
Canned fruit & juice	113.8	111.0	115.4	116.4	118.9	119.1	119.5	119.7	119.8	119.8
Frozen fruit & juice	118.5	103.0	113.4	112.6	125.4	130.0	131.1	130.1	130.1	131.8
Fresh veg. excl. potatoes	100.3	99.3	99.0	96.4	135.9	96.8	94.2	98.5	88.5	86.6
Canned veg. & juices	101.9	101.2	103.5	105.9	103.2	103.3	103.6	103.2	103.2	103.7
Frozen vegetables	106.5	106.6	107.3	107.4	107.0	106.6	107.2	106.7	106.4	106.6
Potatoes	101.2	104.0	120.5	132.3	107.5	100.2	108.0	97.6	124.2	89.9
Eggs	95.6	99.5	87.6	80.1	76.5	73.8	79.7	66.7	68.0	75.1
Bakery products	113.9	116.6	118.5	117.9	122.4	123.3	123.1	123.5	124.3	125.5
Meats	90.9	93.9	100.3	106.4	98.4	97.9	98.4	98.6	101.8	104.2
Beef & veal	90.3	88.1	95.4	101.8	96.5	96.4	100.9	101.0	102.4	103.8
Pork	89.1	99.9	104.7	114.1	97.8	96.4	91.5	92.0	100.0	104.1
Processed poultry	110.4	116.7	103.5	102.5	97.9	94.7	98.7	100.6	107.4	114.2
Fish	114.6	124.9	141.9	136.3	152.0	149.6	160.1	159.1	159.8	157.4
Dairy products	100.2	99.9	101.7	101.1	101.0	100.5	100.0	99.9	100.1	100.5
Processed fruits & vegetables	107.9	104.9	108.6	109.5	110.9	111.4	111.9	111.6	111.5	112.0
Shortening & cooking oils	123.9	103.3	104.0	103.5	114.2	114.5	114.7	117.5	118.5	122.8
Consumer finished goods less foods	103.3	98.5	100.7	100.6	101.5	101.5	101.4	102.5	102.9	103.0
Beverages, alcoholic	107.6	110.1	110.4	110.8	110.5	111.4	112.2	112.1	111.6	111.7
Soft drinks	107.7	109.5	111.9	112.2	113.0	113.3	113.9	114.1	114.0	113.4
Apparel	105.0	106.3	108.4	108.1	110.3	110.4	110.7	110.9	111.2	111.7
Footwear	104.7	106.8	109.4	107.5	112.7	113.7	114.3	114.4	114.3	114.8
Tobacco products	132.5	142.4	154.7	150.9	166.6	166.7	166.5	166.5	166.8	166.8
Intermediate materials 2/	102.6	99.1	101.5	101.5	104.2	104.3	104.6	105.5	106.2	107.4
Materials for food manufacturing	101.4	98.4	100.8	102.3	101.9	102.0	101.7	102.8	104.2	107.0
Flour	99.8	94.5	92.9	93.2	94.4	97.6	94.1	96.8	97.3	109.7
Refined sugar 3/	102.8	103.2	106.5	106.8	105.7	107.0	106.7	107.4	107.1	106.6
Crude vegetable oils	137.5	84.8	84.0	84.0	104.9	106.7	101.2	109.9	114.1	124.2
Crude materials 4/	95.8	87.7	93.7	95.1	93.7	94.7	94.1	95.7	97.1	98.2
Foodstuffs & feedstuffs	94.8	93.2	96.2	99.7	97.2	99.7	99.7	101.2	104.5	108.4
Fruits & vegetables 5/	102.6	103.9	106.6	110.3	118.2	100.5	99.3	99.8	99.3	99.6
Grains	96.1	79.2	71.1	74.0	77.5	83.5	80.6	82.3	82.9	103.4
Livestock	89.1	91.8	101.9	109.8	99.3	105.7	105.7	107.1	111.1	105.4
Poultry, live	117.8	129.6	101.2	94.2	99.1	86.9	96.9	97.6	112.2	130.4
Fibers, plant & animal	97.4	88.3	106.5	116.1	100.7	97.8	103.2	103.6	103.7	107.6
Fluid milk	93.6	90.9	91.9	88.1	90.5	89.1	86.7	86.7	85.3	83.8
Oilseeds	94.4	91.4	99.3	105.6	110.0	111.1	112.6	121.5	127.5	153.8
Tobacco, leaf	101.2	89.7	85.8	84.6	87.2	87.2	87.2	87.2	82.0	82.0
Sugar, raw cane	104.6	104.9	110.3	111.0	109.7	111.4	111.4	111.9	111.8	112.7
All commodities	103.1	100.1	102.8	103.0	104.6	104.8	104.9	105.8	106.5	107.4
Industrial commodities	103.7	99.9	102.6	102.4	104.4	104.6	104.7	105.6	106.1	106.5
All foods 6/	103.9	105.5	107.8	109.0	109.2	108.0	108.6	108.9	110.1	111.8
Farm products & processed foods & feeds	100.6	101.2	103.7	105.5	105.3	105.3	105.7	106.5	108.1	111.3
Farm products	95.1	92.9	95.4	98.8	97.3	97.9	97.7	99.0	101.7	106.4
Processed foods & feeds 6/	103.5	105.4	107.9	109.0	109.3	109.1	109.7	110.3	111.4	113.9
Cereal & bakery products	110.2	111.0	112.6	111.9	118.2	119.6	119.6	120.2	120.3	123.0
Sugar & confectionery	107.9	109.6	112.7	112.9	112.5	112.8	113.2	113.3	113.6	113.6
Beverages	107.7	114.5	112.5	113.0	112.5	113.0	113.8	114.2	114.0	114.0

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). R = revised.

Information contact: Bureau of Labor Statistics (202) 523-1913.

# Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual				1987	1988					
	1984	1985	1986	1987	June	Jan	Feb	Mar	Apr	May	June
<b>Market basket 1/</b>											
Retail cost (1982-84=100)	102.9	104.1	106.3	111.6	112.5	113.9	113.5	113.5	114.2	115.0	115.5
Farm value (1982-84=100)	103.5	96.2	94.9	97.1	101.6	95.8	96.1	96.4	96.6	99.2	102.7
Farm-retail spread (1982-84=100)	102.6	108.3	112.5	119.4	118.8	123.6	122.8	122.7	123.7	123.4	122.4
Farm value-retail cost (%)	35.2	32.4	31.2	30.5	31.3	29.4	29.7	29.8	29.6	30.2	31.1
<b>Meat products</b>											
Retail cost (1982-84=100)	99.8	98.9	102.0	109.6	110.6	110.1	110.2	110.9	110.8	111.7	113.8
Farm value (1982-84=100)	99.4	91.3	94.3	101.2	110.9	93.3	99.4	100.2	102.0	103.2	108.3
Farm-retail spread (1982-84=100)	100.3	106.7	109.8	118.3	110.3	127.4	121.3	121.9	119.9	120.4	119.4
Farm value-retail cost (%)	50.4	46.8	46.8	46.7	50.8	42.9	45.7	45.8	46.6	46.8	48.2
<b>Dairy products</b>											
Retail cost (1982-84=100)	101.3	103.2	103.3	105.9	105.5	107.4	107.3	107.2	107.1	107.4	107.2
Farm value (1982-84=100)	99.2	95.2	92.6	93.3	90.9	92.4	90.6	89.3	88.1	86.5	86.3
Farm-retail spread (1982-84=100)	103.2	110.5	113.3	117.5	119.0	121.3	122.7	123.7	124.6	126.7	126.5
Farm value-retail cost (%)	47.0	44.2	43.0	42.3	41.3	41.3	40.5	40.0	39.5	38.6	38.6
<b>Poultry</b>											
Retail cost (1982-84=100)	107.3	106.2	114.2	112.6	112.1	108.9	108.4	109.1	110.2	114.0	120.1
Farm value (1982-84=100)	112.6	105.9	115.1	93.8	91.5	88.8	83.6	88.2	89.7	105.1	114.7
Farm-retail spread (1982-84=100)	101.1	106.6	113.3	134.2	135.8	132.0	137.0	133.1	133.9	124.2	126.3
Farm value-retail cost (%)	56.2	53.3	53.9	44.6	43.7	43.6	41.3	43.3	43.5	49.4	51.1
<b>Eggs</b>											
Retail cost (1982-84=100)	109.1	91.0	97.2	91.5	84.1	90.1	85.5	87.9	85.0	81.8	83.6
Farm value (1982-84=100)	110.1	85.7	92.4	76.8	70.8	68.2	64.6	70.8	61.9	56.6	62.7
Farm-retail spread (1982-84=100)	107.4	100.4	106.0	117.9	108.1	129.3	123.1	118.7	126.5	127.1	121.1
Farm value-retail cost (%)	64.8	60.5	61.0	53.9	54.0	48.7	48.5	51.7	46.8	44.4	48.2
<b>Cereal &amp; bakery products</b>											
Retail cost (1982-84=100)	103.9	107.9	110.9	114.8	114.7	118.1	118.7	118.9	119.8	120.3	120.8
Farm value (1982-84=100)	102.9	94.3	76.3	71.0	68.9	98.2	105.6	102.1	101.2	106.0	117.1
Farm-retail spread (1982-84=100)	104.1	109.8	115.7	129.9	121.1	120.9	120.5	121.2	122.4	122.3	121.3
Farm value-retail cost (%)	12.1	10.7	8.4	7.6	7.4	10.2	10.9	10.5	10.4	10.8	11.9
<b>Fresh fruits</b>											
Retail cost (1982-84=100)	106.6	118.4	120.4	135.6	144.3	133.6	133.7	135.2	141.8	149.8	142.2
Farm value (1982-84=100)	113.7	110.8	103.8	113.9	122.3	110.6	104.4	102.2	89.8	122.9	105.0
Farm-retail spread (1982-84=100)	103.3	121.8	128.0	145.7	154.5	144.2	147.2	150.5	165.8	162.2	159.4
Farm value-retail cost (%)	33.7	29.6	27.4	26.5	26.8	26.2	24.7	23.9	20.0	25.9	23.3
<b>Fresh vegetables</b>											
Retail costs (1982-84=100)	108.2	103.5	107.7	121.6	129.2	143.9	133.7	125.6	127.5	124.5	121.8
Farm value (1982-84=100)	108.3	93.1	90.0	112.0	119.5	122.7	100.4	97.4	104.2	89.4	95.3
Farm-retail spread (1982-84=100)	108.2	108.9	116.8	126.5	134.2	154.9	150.8	140.1	139.5	142.6	135.4
Farm value-retail cost (%)	34.0	30.5	28.4	31.3	31.4	28.9	25.5	26.3	27.7	24.4	26.6
<b>Processed fruits &amp; vegetables</b>											
Retail cost (1982-84=100)	104.3	107.0	105.3	109.0	109.5	111.6	113.4	114.3	116.0	115.9	117.6
Farm value (1982-84=100)	106.8	117.7	101.5	111.1	110.4	130.0	132.0	131.3	133.1	135.8	137.4
Farm-retail spread (1982-84=100)	103.4	103.7	106.4	108.3	109.2	105.8	107.6	109.0	110.7	109.7	111.4
Farm value-retail costs (%)	24.4	26.2	22.9	24.2	24.0	27.7	27.7	27.3	27.3	27.9	27.8
<b>Fats &amp; oils</b>											
Retail cost (1982-84=100)	106.6	108.9	106.5	108.1	107.8	108.5	109.5	110.3	110.3	111.2	111.5
Farm value (1982-84=100)	124.3	104.3	76.2	74.1	72.2	93.5	92.4	93.0	95.6	100.6	110.4
Farm-retail spread (1982-84=100)	100.2	110.6	117.6	120.6	120.9	114.0	116.2	116.7	115.7	115.1	111.9
Farm value-retail cost (%)	31.3	25.8	19.2	18.4	18.0	23.2	22.4	22.7	23.3	24.3	26.6
	Annual				1987	1988					
	1984	1985	1986	1987	June	Jan	Feb	Mar	Apr	May	June
<b>Beef, Choice</b>											
Retail price 2/ (cts/lb)	239.6	232.6	230.7	242.5	249.4	242.9	246.3	248.5	250.2	253.2	259.9
Net carcass value 3/ (cts)	147.6	135.2	133.1	145.3	157.6	144.7	148.3	154.0	156.7	166.2	158.2
Net farm value 4/ (cts)	140.0	126.8	124.4	137.9	148.7	136.6	143.2	148.6	152.4	158.6	148.1
Farm-retail spread (cts)	99.6	105.8	106.3	104.6	100.7	106.3	103.1	99.9	97.7	94.6	111.8
Carcass-retail spread 5/ (cts)	92.0	97.4	97.6	97.2	91.8	98.2	98.0	94.5	93.4	87.0	101.6
Farm-carcass spread 6/ (cts)	7.6	8.4	8.7	7.4	8.9	8.1	5.1	5.5	4.3	7.6	10.1
Farm value-retail price (%)	58	55	54	57	60	56	58	60	61	63	57
<b>Pork</b>											
Retail price 2/ (cts/lb)	162.0	162.0	178.4	188.4	187.6	185.3	183.1	183.3	182.9	183.6	187.9
Wholesale value 3/ (cts)	110.1	101.1	110.9	113.0	124.3	104.0	105.3	103.5	102.5	106.4	106.3
Net farm value 4/ (cts)	77.4	71.4	82.4	82.7	98.2	71.3	75.5	68.6	67.2	76.1	76.8
Farm-retail spread (cts)	84.6	90.6	96.0	105.7	89.4	114.0	107.6	114.7	115.7	107.5	111.1
Wholesale-retail spread 5/ (cts)	51.9	60.9	67.5	75.4	63.3	81.3	77.8	79.8	80.4	77.2	81.6
Farm-wholesale spread 6/ (cts)	32.7	29.7	28.5	30.3	26.1	32.7	29.8	34.9	35.3	30.3	29.5
Farm value-retail price (%)	48	44	46	44	52	38	41	37	37	41	41

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Cost Review, 1986. AER No. 574, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1286.



Table 9.—Price Indexes of Food Marketing Costs

	Annual			1987				1988	
	1985	1986	1987	I	II	III	IV	I	II P
	1967=100								
Labor-hourly earnings and benefits	363.0	359.8	367.7	366.5	366.7	366.2	368.3	370.9	372.3
Processing	357.9	365.8	377.4	375.3	376.4	373.3	377.1	381.6	384.7
Wholesaling	382.7	373.0	393.4	392.1	391.6	393.5	396.4	398.9	400.3
Retailing	364.1	348.0	346.6	346.5	346.0	347.0	347.0	348.0	347.7
Packaging & containers	312.1	317.4	329.8	325.0	328.1	330.6	335.8	341.0	347.8
Paperboard boxes & containers	271.6	269.1	288.0	281.5	285.5	288.8	296.5	299.1	307.1
Metal cans	416.9	430.1	433.0	431.3	433.5	433.5	433.5	443.9	443.9
Paper bags & related products	294.7	307.9	331.3	322.4	328.8	333.4	342.4	351.1	359.9
Plastic films & bottles	274.4	274.8	280.2	277.2	278.0	280.1	284.7	288.3	302.4
Glass containers	380.0	398.0	402.0	402.5	403.3	401.4	400.1	400.0	398.7
Metal foil	213.8	209.3	222.1	210.2	213.1	226.3	241.2	249.0	256.9
Transportation services	393.9	391.7	385.0	384.1	385.3	385.4	385.3	399.6	405.5
Advertising	320.2	339.7	361.1	354.9	359.0	363.2	367.4	377.9	382.6
Fuel & power	700.0	590.2	596.7	581.7	592.4	612.2	602.4	575.7	585.1
Electric	453.5	457.9	450.5	440.9	448.6	465.5	444.7	440.3	446.8
Petroleum	821.5	499.8	561.4	520.5	541.3	582.5	601.4	526.7	534.0
Natural gas	1,158.2	1,096.9	1,049.0	1,061.2	1,064.7	1,057.2	1,027.6	1,021.3	1,042.7
Communications, water & sewage	224.9	236.1	238.4	236.9	237.7	239.7	239.5	239.9	240.9
Rent	268.3	273.8	279.4	276.2	279.2	280.6	281.2	278.7	278.7
Maintenance & repair	360.3	368.5	382.6	377.5	379.7	385.1	387.9	391.2	395.3
Business services	321.9	334.1	346.1	341.8	345.3	346.8	350.6	352.5	356.5
Supplies	287.9	282.8	286.8	283.6	286.2	287.1	290.2	294.9	302.2
Property taxes & insurance	362.0	382.3	399.6	392.6	397.3	401.2	408.3	412.8	416.8
Interest, short-term	157.2	125.1	132.9	116.4	134.0	137.5	143.5	131.4	142.0
Total marketing cost index	358.6	355.0	363.2	359.9	362.0	363.8	366.0	369.0	372.7

\* Indexes measure changes in employee earnings and benefits and in prices of supplies and services used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. P = preliminary.

Information contact: Denis Dunham (202) 786-1870.

# Livestock & Products

Table 10.—U.S. Meat Supply & Use

Item	Beg. stocks	Pro- duc- tion 1/	Im- ports	Total supply	Ex- ports	Ship- ments	Ending stocks	Civilian consumption		Primary market price 3/
								Total	Per capita 2/	
								Pounds		
Million pounds 4/										
Beef										
1985	472	23,728	2,071	26,271	328	51	420	25,472	78.8	58.37
1986	420	24,371	2,129	26,919	521	52	412	25,935	78.4	57.75
1987	412	23,566	2,269	26,247	604	52	386	25,205	73.4	64.60
1988 F	386	23,241	2,350	25,977	620	60	400	24,897	71.8	68-71
Pork										
1985	348	14,807	1,128	16,282	128	131	289	15,733	62.0	44.77
1986	289	14,063	1,122	15,474	86	132	248	15,008	58.6	51.19
1987	248	14,374	1,195	15,817	109	124	347	15,237	59.2	51.69
1988 F	347	15,725	1,275	17,347	145	140	375	16,687	63.7	42-45
Veal										
1985	14	515	20	549	4	1	11	533	1.8	62.42
1986	11	524	27	562	5	1	7	550	1.9	60.89
1987	7	429	24	460	7	1	4	449	1.5	78.05
1988 F	4	412	28	442	5	1	7	429	1.4	84-87
Lamb and mutton										
1985	7	359	36	402	1	2	13	386	1.4	68.61
1986	13	338	41	392	2	2	13	375	1.4	70.26
1987	13	315	44	372	2	2	8	360	1.3	78.09
1988 F	8	334	55	395	1	1	9	384	1.4	67-70
Total red meat										
1985	841	39,409	3,255	43,505	461	186	733	42,125	144.0	--
1986	733	39,296	3,319	43,348	613	187	680	41,868	140.2	--
1987	680	38,684	3,533	42,897	722	179	745	41,251	135.4	--
1988 F	745	39,712	3,711	44,168	771	202	791	42,404	138.4	--
Broilers										
1985	20	13,762	0	13,781	417	143	27	13,195	55.2	50.8
1986	27	14,316	0	14,342	566	149	24	13,603	56.3	56.9
1987	24	15,594	0	15,618	752	151	25	14,691	60.3	47.4
1988 F	25	16,183	0	16,208	673	142	30	15,362	62.4	53-56
Mature chicken										
1985	119	636	0	755	21	1	144	589	2.5	--
1986	144	627	0	771	16	3	163	589	2.4	--
1987	163	650	0	814	15	2	188	608	2.5	--
1988 F	188	658	0	846	18	3	150	674	2.7	--
Turkeys										
1985	125	2,942	0	3,067	27	7	150	2,884	12.0	75.5
1986	150	3,271	0	3,422	27	4	178	3,212	13.3	72.2
1987	178	3,828	0	4,006	33	4	282	3,686	15.1	57.8
1988 F	282	4,006	0	4,288	38	4	175	4,072	16.5	61-64
Total poultry										
1985	264	17,340	0	17,604	465	151	321	16,668	69.7	--
1986	321	18,215	0	18,535	609	156	365	17,405	72.0	--
1987	365	20,072	0	20,437	800	157	495	18,985	77.9	--
1988 F	495	20,847	0	21,342	729	149	355	20,108	81.7	--
Red meat & poultry										
1985	1,105	56,748	3,255	61,108	926	336	1,054	58,792	213.6	--
1986	1,054	57,511	3,319	61,884	1,223	343	1,044	59,273	212.2	--
1987	1,045	58,756	3,533	63,334	1,522	336	1,240	60,236	212.6	--
1988 F	1,240	60,534	3,711	65,485	1,500	351	1,146	62,487	220.0	--

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry.  
 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was .74 during 1962-85. It was lowered to .73 for 1986 and to .71 for 1987 and later.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry. F = forecast. -- = not available.

Information contacts: Ron Gustafson, Leland Southard, or Mark Weimar (202) 786-1285.

Table 11.—U.S. Egg Supply &amp; Use

	Beg. stocks	Pro- duc- tion	Im- ports	Total supply	Ex- ports	Ship- ments	Hatch- ing use	Ending stocks	Consumption		Wholesale price*
									Total	Per capita	
				Million dozen					No	Cts/doz	
1984	9.3	5,708.3	32.0	5,749.5	58.2	27.8	529.7	11.1	5,122.8	259.4	80.9
1985	11.1	5,688.0	12.7	5,711.8	70.6	30.3	548.1	10.7	5,052.0	253.4	66.4
1986	10.7	5,705.0	13.7	5,729.3	101.6	28.0	566.8	10.4	5,022.5	249.5	71.1
1987	10.4	5,796.5	5.6	5,811.7	111.2	25.1	595.3	14.0	5,066.9	249.5	61.6
1988 F	14.4	5,708.5	3.9	5,726.8	121.7	22.8	606.7	10.0	4,965.5	242.1	62-65
1989 F	10.0	5,655.0	4.0	5,669.0	106.0	24.0	630.0	10.0	4,899.0	236.7	70-76

\* Cartoned Grade A large eggs, New York. F = forecast.

Information contact: Robert Bishop (202) 786-1714.

Table 12.—U.S. Milk Supply & Use<sup>1</sup>

Calendar year	Pro-duction	Farm use	Commercial		Im-ports	Total commer- cial supply	CCC net re- movals	Commercial		All milk price 2/ \$/cwt
			Farm market- ings	Beg. stocks				Ending stocks	Disap- pearance	
			Billion pounds							
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986	143.4	2.4	141.0	4.6	2.7	148.3	10.6	4.2	133.5	12.51
1987	142.5	2.2	140.3	4.2	2.5	146.9	6.7	4.6	135.6	12.54
1988 F	143.6	2.2	141.4	4.6	2.5	148.5	8.2	4.5	135.8	12.00

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 786-1770.

Table 13.—Poultry &amp; Eggs

	Annual			1987		1988					
	1985	1986	1987	June	Jan	Feb	Mar	Apr	May	June	
Broilers, federally inspected slaughter, certified (mil lb)	13,569.2	14,265.6	15,502.5	1,371.5	1,294.0	1,299.6	1,402.6	1,313.5	1,367.3	1,379.4	
Wholesale price, 12-city, (cts/lb)	50.8	56.9	47.4	45.3	43.9	44.9	48.4	48.7	56.5	61.5	
Price of grower feed (\$/ton)	197	187	224	184	194	198	196	181	181	179	
Broiler-feed price ratio 1/	3.1	3.7	3.7	3.0	2.8	2.6	2.8	3.1	3.7	4.1	
Stocks beginning of period (mil lb)	19.7	26.6	23.9	27.0	24.8	31.0	32.4	35.5	40.8	40.4	
Broiler-type chicks hatched (mil) 2/	4,803.8	5,013.3	535.1	461.4	464.5	431.7	482.8	470.2	485.5	472.5	
Turkeys											
Federally inspected slaughter, certified (mil lb)	2,800	3,133	3,717	330.1	254.6	265.4	316.6	276.6	325.8	365.0	
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts/lb)	75.5	72.2	57.8	56.2	52.8	47.1	47.0	46.9	49.2	56.9	
Price of turkey grower feed (\$/ton)	212	215	213	207	227	223	226	210	212	211	
Turkey-feed price ratio 1/	4.5	4.1	3.9	3.3	2.8	2.6	2.5	2.7	2.8	3.0	
Stocks beginning of period (mil lb)	125.3	150.2	178.2	298.1	282.4	299.3	335.1	353.3	384.4	422.4	
Poults placed in U.S. (mil)	197.8	225.4	26.5	27.3	22.3	23.1	25.0	24.6	25.3	25.9	
Eggs											
Farm Production (mil)	68,256	68,459	69,558	5,616	5,980	5,607	5,964	5,656	5,770	5,518	
Average number of layers (mil)	277	278	280	276	283	282	278	275	272	269	
Rate of lay (eggs per layer on farms)	247	248	248	22.9	21.1	19.9	21.5	20.7	21.2	22.3	
Cartoned price, New York, grade A large (cts/doz) 3/	66.4	71.1	61.6	58.7	55.9	52.7	56.4	52.1	50.9	56.8	
Price of laying feed (\$/ton)	182	174	170	167	176	177	175	175	176	176	
Egg-feed price ratio 1/	6.3	7.0	7.6	6.0	5.6	5.3	5.8	5.2	4.9	5.2	
Stocks, first of month											
Shell (mil doz)	.93	.72	1.16	1.14	1.29	2.01	1.59	2.01	.42	.63	
Frozen (mil doz)	10.2	10.0	9.8	13.2	13.1	13.9	13.9	10.7	13.2	15.4	
Replacement chicks hatched (mil)	407	424	431	37.3	29.5	28.5	34.8	35.1	35.8	33.0	

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 12 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Mark Weimar (202) 786-1714.



Table 14.—Dairy

	Annual			1987	1988					
	1985	1986	1987	June	Jan	Feb	Mar	Apr	May	June
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	11.48	11.30	11.23	11.07	10.91	10.60	10.43	10.33	10.34	10.34
Wholesale prices										
Butter, Grade A Chi. (cts/lb)	141.1	144.5	140.2	144.6	131.9	131.0	131.0	131.0	131.0	133.5
Am. cheese, Wis. assembly pt. (cts/lb)	127.7	127.3	123.2	122.0	118.4	116.1	115.6	115.1	115.0	116.2
Nonfat dry milk, (cts/lb) 2/	84.0	80.6	79.3	79.2	79.8	73.0	73.0	73.1	73.4	74.2
USDA net removals										
Total milk equiv. (mil lb) 3/	13,174.1	10,628.1	6,706.0	384.0	1,628.4	1,486.5	1,091.9	1,235.8	1,227.0	551.0
Butter (mil lb)	334.2	287.6	187.3	4.0	56.4	59.7	36.1	42.7	42.4	13.1
Am. cheese (mil lb)	629.0	468.4	282.0	30.1	46.6	25.4	34.7	35.6	35.0	27.9
Nonfat dry milk (mil lb)	940.6	827.3	559.4	67.2	48.1	39.6	49.8	49.2	53.6	28.4
Milk										
Milk prod. 21 States (mil lb) 1	121,043	121,433	121,094	10,475	10,205	9,740	10,647	10,593	11,041	10,480
Milk per cow (lb)	13,160	13,399	13,932	1,208	1,177	1,126	1,234	1,229	1,280	1,220
Number of milk cows (thou)	9,198	9,063	8,692	8,673	8,667	8,649	8,630	8,618	8,627	8,588
U.S. milk production (mil lb)	143,147	143,381	142,462	6/12,291	6/12,042	6/11,493	6/12,563	6/12,482	6/13,010	6/12,348
Stock, beginning										
Total (mil lb)	16,704	13,695	12,867	13,294	7,371	7,628	8,462	10,787	10,457	10,535
Commercial (mil lb)	4,937	4,590	4,165	5,182	4,577	4,777	4,910	5,074	5,134	5,371
Government (mil lb)	11,767	9,105	8,702	8,112	2,794	2,852	3,552	5,712	5,323	5,164
Imports, total (mil lb) 3/	2,777	2,733	2,490	160	235	196	172	172	159	--
Commercial disappearance milk equiv. (mil lb)	130,640	133,498	135,630	11,407	10,262	9,895	11,292	11,151	11,449	--
Butter										
Production (mil lb)	1,247.8	1,202.4	1,104.1	81.5	124.7	117.1	116.3	111.7	107.9	91.7
Stocks, beginning (mil lb)	296.5	205.5	193.0	251.1	143.2	157.3	198.3	221.1	239.8	282.5
Commercial disappearance (mil lb)	918.2	922.9	902.5	62.5	65.6	52.0	73.7	76.3	57.0	--
American cheese										
Production (mil lb)	2,855.2	2,798.2	2,716.7	245.9	225.8	221.0	244.6	251.8	258.7	245.2
Stocks, beginning (mil lb)	960.5	850.2	697.1	620.9	370.4	365.7	362.0	365.4	377.0	387.5
Commercial disappearance (mil lb)	2,279.1	2,382.8	2,444.1	201.9	173.5	196.7	209.0	203.6	221.1	--
Other cheese										
Production (mil lb)	2,225.7	2,411.1	2,627.6	219.7	207.0	207.8	239.3	221.3	231.5	229.3
Stocks, beginning (mil lb)	101.4	94.1	92.0	97.3	89.7	90.0	88.4	89.0	92.7	93.4
Commercial disappearance (mil lb)	2,515.7	2,684.9	2,880.1	240.3	224.3	224.8	254.6	232.5	246.5	--
Nonfat dry milk										
Production (mil lb)	1,390.0	1,284.1	1,059.0	109.2	83.8	85.8	95.8	102.6	104.1	104.6
Stocks, beginning (mil lb)	1,247.6	1,011.1	686.8	485.5	177.2	130.7	152.2	151.1	171.4	180.5
Commercial disappearance (mil lb)	435.0	479.1	495.1	45.7	44.0	39.7	53.4	39.0	47.5	--
Frozen dessert										
Production (mil gal) 4/	1,251.0	1,248.6	1,263.4	134.8	76.0	87.6	110.4	107.9	120.1	139.0
	Annual			1986	1987				1988	
	1985	1986	1987	IV	I	II	III	IV	I	II P
Milk production (mil lb)	143,147	143,381	142,462	33,716	34,814	37,399	35,512	34,737	36,098	37,840
Milk per cow (lb)	12,994	13,260	13,786	3,199	3,340	3,617	3,453	3,375	3,509	3,691
No. of milk cows (thou)	11,016	10,813	10,334	10,541	10,424	10,339	10,283	10,291	10,286	10,252
Milk-feed price ratio 5/	1.72	1.73	1.83	1.91	1.88	1.76	1.80	1.89	1.74	1.52
Returns over concentrate 5/ costs (\$/cwt milk)	9.54	9.23	9.50	10.10	9.82	8.99	9.26	9.97	9.26	8.24

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process.  
3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated. -- = not available. P = preliminary.

Information contact: Jim Miller (202) 786-1770.

Table 15.—Wool

	Annual			1987	1988					
	1985	1986	1987	June	Jan	Feb	Mar	Apr	May	June
U.S. wool price, Boston 1/ (cts/lb)	192	191	265	270	315	397	435	453	463	460
Imported wool price, Boston 2/ (cts/lb)	197	201	247	283	295	330	370	441	423	495
U.S. mill consumption, scoured										
Apparel wool (thou lb)	106,051	126,768	129,677	12,738	10,106	10,103	13,514	10,138	9,601	12,934
Carpet wool (thou lb)	10,562	9,960	13,092	934	1,323	1,418	1,786	1,344	1,282	1,223

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up.  
2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals.

	Annual			1987	1988					
	1985	1986	1987	June	Jan	Feb	Mar	Apr	May	June
Cattle on feed (7 States)										
Number on feed (thou head) 1/	8,635	7,920	7,643	7,560	8,066	7,856	7,572	7,726	7,504	7,814
Placed on feed (thou head)	19,346	20,035	21,020	1,422	1,660	1,369	1,833	1,531	2,170	1,367
Marketings (thou head)	18,989	19,263	19,390	1,702	1,759	1,527	1,573	1,614	1,719	1,692
Other disappearance (thou head)	1,132	1,049	1,207	87	111	126	106	139	141	68
Beef steer-corn price ratio, Omaha 2/	23.3	31.0	41.0	38.8	36.4	37.4	38.4	39.3	38.6	27.9
Hog-corn price ratio, Omaha 2/	17.8	27.8	32.8	34.3	25.0	25.7	23.0	22.5	24.3	18.9
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha	58.37	57.75	64.60	68.83	65.00	68.31	71.53	72.71	75.15	70.58
Utility cows, Omaha	38.32	37.19	44.83	38.17	47.83	49.55	49.83	49.41	48.79	42.68
Choice vealers, S. St. Paul	58.28	59.92	78.74	90.63	86.88	87.50	87.50	96.41	97.66	100.88
Feeder cattle										
Choice, Kansas City, 600-700 lb.	64.56	62.79	75.36	74.00	85.00	83.53	85.20	86.50	82.88	77.38
Slaughter hogs										
Barrows & gilts, 7-markets	44.77	51.19	51.69	61.08	44.43	47.01	42.79	42.10	47.55	45.60
Feeder pigs										
S. Mo. 40-50 lb. (per head)	37.20	45.62	46.69	45.89	37.47	44.80	48.65	52.16	46.85	31.40
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	68.61	69.46	78.08	84.83	83.53	77.25	83.75	76.50	72.67	59.38
Ewes, Good, San Angelo	34.02	34.78	38.62	34.62	43.19	38.25	41.17	40.17	36.38	36.30
Feeder lambs										
Choice, San Angelo	85.91	73.14	102.26	94.56	113.63	112.63	111.30	100.25	90.63	77.80
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb.	90.76	88.98	97.21	105.71	97.15	99.50	103.47	105.25	111.70	106.38
Canner & cutter cow beef	74.13	71.31	83.70	84.15	88.98	92.18	90.33	89.69	89.88	81.28
Pork loins, 8-14 lb. 3/	91.51	104.78	106.23	124.38	102.43	94.93	87.82	94.03	112.75	111.31
Pork bellies, 12-14 lb.	59.50	65.82	63.11	78.44	51.82	48.40	45.32	43.13	46.09	45.51
Hams, skinned, 14-17 lb.	67.50	80.01	80.96	78.91	66.70	76.67	78.35	68.27	67.70	66.51
All fresh beef retail price 4/	--	--	212.64	214.41	213.95	217.58	219.97	219.68	221.54	227.18
Commercial slaughter (thou head)*										
Cattle	36,293	37,288	35,647	3,035	2,921	2,758	2,896	2,784	2,908	3,067
Steers	16,912	17,516	17,443	1,528	1,464	1,400	1,436	1,448	1,509	1,548
Heifers	11,237	11,097	10,906	902	891	815	894	823	850	913
Cows	7,391	7,960	6,610	547	519	495	512	462	494	548
Bulls & stags	758	715	689	58	47	48	54	51	55	58
Calves	3,385	3,408	2,815	225	214	210	223	176	179	212
Sheep & lambs	6,165	5,635	5,200	420	390	416	548	404	427	428
Hogs	84,492	79,598	81,081	6,160	6,977	6,682	7,680	7,090	6,881	6,898
Commercial production (mil lb)										
Beef	23,557	24,213	23,405	1,928	1,943	1,828	1,925	1,842	1,918	2,024
Veal	499	509	416	35	32	32	33	28	30	34
Lamb & mutton	352	331	309	24	24	26	35	26	27	27
Pork	14,728	13,988	14,312	1,086	1,244	1,183	1,360	1,263	1,231	1,232
	Annual			1987				1988		
	1985	1986	1987	I	II	III	IV	I	II	III
Cattle on feed (13 States)										
Number on feed (thou head) 1/	10,653	9,754	9,245	9,245	8,807	8,666	8,992	9,769	9,365	8,991
Placed on feed (thou head)	23,366	23,583	24,874	5,680	5,906	6,590	6,698	5,796	5,898	--
Marketings (thou head)	22,887	22,856	22,971	5,747	5,619	6,022	5,583	5,810	5,854	6/6,219
Other disappearance (thou head)	1,378	1,236	1,379	371	428	242	338	390	418	--
Hogs & pigs (10 States) 5/										
Inventory (thou head) 1/	42,420	41,100	39,690	39,690	38,370	40,880	43,075	42,845	41,145	44,040
Breeding (thou head) 1/	5,348	5,258	5,110	5,110	5,215	5,325	5,300	5,465	5,500	5,625
Market (thou head) 1/	37,072	35,842	34,580	34,580	33,155	35,555	37,775	37,380	35,645	38,415
Farrowings (thou head)	8,831	8,223	8,783	1,916	2,352	2,257	2,259	2,103	2,552	6/2,393
Pig crop (thou head)	67,648	63,835	68,417	14,840	18,601	17,481	17,503	16,331	19,968	--

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Beginning January 1984 prices are for 14-17 lb.; January 1986 prices are for 14-18 lb. 4/ New series estimating the composite price of all beef grades and ground beef sold by retail stores. This new series in addition to, but does not replace, the series for the retail price of choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 6/ Intentions. \*Classes estimated. -- = not available.

Information contacts: Ron Gustafson or Leland Southard (202) 786-1285.

## Crops & Products

Table 17.—Supply & Utilization<sup>1,2</sup>

	Area				Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested	Yield								
		Mil acres		Bu./acre								
Wheat												
1983/84	30.0	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.51
1984/85	18.3	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.39
1985/86	18.8	75.6	64.7	37.5	2,425	3,866	279	767	1,915	2,561	1,905	3.08
1986/87*	20.2	72.1	60.7	34.4	2,092	4,018	413	780	1,004	2,197	1,821	2.42
1987/88*	27.9	65.8	55.9	37.6	2,105	3,941	300	805	1,600	2,705	1,236	2.57
1988/89*	26.5	65.9	52.9	34.4	1,821	3,102	270	835	1,400	2,505	597	3.45-3.95
		Mil acres		Lb./acre					Mil cwt (rough equiv.)			
Rice												
1983/84	1.74	2.10	2.17	4,598	99.7	172.1	--	6/54.9	70.3	125.0	46.9	8.57
1984/85	.79	2.83	2.80	4,954	138.8	187.3	--	6/60.5	62.1	122.6	64.7	8.04
1985/86	1.24	2.51	2.49	5,414	134.9	201.8	--	6/65.8	58.7	124.5	77.3	6.53
1986/87*	1.27	2.36	2.36	5,651	133.4	213.3	--	6/76.3	85.4	161.7	51.6	3.75
1987/88*	1.26	2.35	2.33	5,482	127.7	182.3	--	6/80.8	70.0	150.8	31.5	6.90-7.10
1988/89*	.80	2.88	2.86	5,342	152.6	187.3	--	6/83.5	75.0	158.5	28.8	5.00-7.00
		Mil acres		Bu./acre					Mil bu			
Corn												
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.21
1984/85	3.9	80.5	71.9	106.7	7,674	8,684	4,079	1,091	1,865	7,036	1,648	2.63
1985/86	5.4	83.4	75.2	118.0	8,877	10,536	4,095	1,160	1,241	6,496	4,040	2.23
1986/87*	12.7	76.7	69.2	119.3	8,250	12,291	4,714	1,192	1,504	7,410	4,882	1.90
1987/88*	21.6	65.7	59.2	119.4	7,064	11,948	4,650	1,236	1,700	7,586	4,365	1.50-2.00
1988/89*	21.3	67.5	57.1	78.5	4,479	8,836	4,400	1,210	1,650	7,260	1,576	2.30-2.70
		Mil acres		Bu./acre					Mil bu			
Sorghum												
1983/84	5.7	11.9	10.0	48.7	488	927	385	10	245	640	287	2.74
1984/85	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86	.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1986/87*	2.3	15.3	13.9	67.7	938	1,489	533	15	198	746	743	1.37
1987/88*	4.1	11.8	10.6	69.9	741	1,484	520	14	225	759	725	1.60-1.70
1988/89*	3.8	10.5	9.0	62.2	561	1,286	500	15	200	715	571	2.10-2.50
		Mil acres		Bu./acre					Mil bu			
Barley												
1983/84	1.1	10.4	9.7	52.3	509	733	282	170	92	544	189	2.47
1984/85	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1985/86	.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1986/87*	1.8	13.1	12.0	50.8	611	942	296	174	137	606	336	1.61
1987/88*	2.9	11.0	10.0	52.6	527	877	251	174	131	555	321	1.81
1988/89*	2.8	9.7	7.4	38.9	288	629	240	175	50	465	164	2.50-2.90
		Mil acres		Bu./acre					Mil bu			
Oats												
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87*	.4	14.7	6.9	56.3	386	603	395	73	3	471	133	1.21
1987/88*	.8	18.0	6.9	54.0	374	552	359	79	3	440	112	1.56
1988/89*	.2	14.0	5.4	38.4	206	378	215	86	1	302	76	2.50-3.00
		Mil acres		Bu./acre					Mil bu			
Soybeans												
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/79	983	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	598	1,721	316	5.84
1985/86	0	63.1	61.6	34.1	2,099	2,415	7/86	1,053	740	1,879	536	5.05
1986/87*	0	60.4	58.3	33.3	1,940	2,476	7/104	1,179	757	2,040	436	4.78
1987/88*	0	57.4	56.4	33.7	1,905	2,341	7/96	1,180	785	2,060	280	6.15
1988/89*	0	58.8	56.9	26.0	1,474	1,754	7/94	1,000	560	1,654	100	7.25-9.75
									Mil lbs			
Soybean oil												
1983/84	--	--	--	--	10,872	12,133	--	9,588	1,824	11,412	721	30.60
1984/85	--	--	--	--	11,468	12,209	--	9,917	1,660	11,577	632	29.50
1985/86	--	--	--	--	11,617	12,257	--	10,053	1,257	11,310	947	18.00
1986/87*	--	--	--	--	12,783	13,745	--	10,833	1,187	12,020	1,725	15.40
1987/88*	--	--	--	--	12,928	14,805	--	10,900	2,050	12,950	1,855	22.50
1988/89*	--	--	--	--	11,100	13,150	--	10,850	1,250	12,100	1,050	23.00-28.00
									Thou tons			
Soybean meal												
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,975	255	188
1984/85	--	--	--	--	24,529	25,784	--	19,480	4,917	24,397	387	125
1985/86	--	--	--	--	24,951	25,338	--	19,090	6,036	25,126	212	155
1986/87*	--	--	--	--	27,758	27,970	--	20,387	7,343	27,730	240	163
1987/88*	--	--	--	--	28,010	28,250	--	21,300	6,650	27,950	300	225
1988/89*	--	--	--	--	23,750	24,050	--	19,150	4,600	23,750	300	235-285

See footnotes at end of table.



Table 17.—Supply &amp; Utilization, continued

	Area				Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested	Yield								
	Mil acres		Lb/acre									
Cotton 10/												Cts/lb
1983/84	6.8	7.9	7.3	508	7.8	15.7	--	5.9	6.8	12.7	2.8	65.30
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.70
1985/86	3.6	10.7	10.2	630	13.4	17.6	--	6.4	2.0	8.4	9.4	56.50
1986/87*	3.4	10.0	8.5	552	9.7	19.1	--	7.4	6.7	14.1	5.0	52.40
1987/88*	3.3	10.4	10.0	706	14.8	19.8	--	7.7	6.6	14.3	5.6	64.20
1988/89*	--	12.2	11.6	616	14.9	20.5	--	7.0	4.7	11.7	8.9	--

\*August 11, 1988 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum, October 1 for soybean meal, and soybean oil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt. of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, and acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks. -- = not available.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1987	1988				
	1983/84	1984/85	1985/86	1986/87	June	Feb	Mar	Apr	May	June
Wholesale prices										
Wheat, No. 1 HRW,										
Kansas City (\$/bu) 2/	3.84	3.74	3.28	2.72	2.70	3.28	3.10	3.14	3.20	3.79
Wheat, DNS,										
Minneapolis (\$/bu) 2/	4.21	3.70	3.25	2.62	2.66	3.26	3.05	3.19	3.30	4.17
Rice, S.W. La. (\$/cwt) 3/	19.38	17.98	16.11	10.25	10.50	24.45	24.50	24.00	20.75	18.85
Wheat										
Exports (mil bu)	1,429	1,424	915	1,004	126	147	151	156	154	129
Mill grind (mil bu)	701	676	703	755	64	58	60	58	65	63
Wheat flour production (mil cwt)	308	301	314	335	28	26	26	26	29	28
Rice										
Exports (mil cwt, rough equiv)	70.3	62.1	58.7	85.4	3.6	4.3	5.9	5.0	7.3	--

	Marketing year 1/			1987				1988		
	1984/85	1985/86	1986/87	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug
Wheat										
Stocks, beginning (mil bu)	1,399	1,425	1,905	2,671.5	2,249.8	1,820.9	2,988.5	2,505.3	1,908.5	1,266.2
Domestic use:										
Food (mil bu)	651	683	714	177.2	180.3	184.9	196.1	175	180	--
Feed & seed (mil bu) 4/	502	363	548	47.6	38.7	345.5	-17.7	13	-2	--
Exports (mil bu)	1,424	915	1,004	202.7	216.8	409.9	308.5	412	467	--

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. -- = not available.

Information contacts: Ed Allen and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1987	1988				
	1983/84	1984/85	1985/86	1986/87	June	Feb	Mar	Apr	May	June
U.S. price, SLM,										
1-1/16 in. (cts/lb) 2/	73.1	60.5	60.0	53.2	70.4	57.8	59.6	60.1	61.6	62.9
Northern Europe prices:										
Index (cts/lb) 3/	87.6	69.2	48.9	62.0	79.3	67.5	66.3	65.8	65.6	68.8
U.S. M 1-3/32 in. (cts/lb) 4/	87.1	73.9	64.8	61.8	76.2	69.8	70.8	72.4	75.3	80.0
U.S. mill consumption (thou bales)	5,927	5,545	6,399	7,452	655	649	706	610	630	586
Exports (thou bales)	6,786	6,201	1,969	6,684	468	740	779	571	517	515
Stocks, beginning (thou bales)	7,937	2,775	4,102	9,348	7,298	12,477	11,273	9,788	8,607	7,460

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook (A) index; average of 5 lowest priced of 11 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.

Table 20.—Feed Grains

	Marketing year 1/				1987	1988				
	1983/84	1984/85	1985/86	1986/87	June	Feb	Mar	Apr	May	June
Wholesale prices										
Corn, No. 2 yellow, Chicago (\$/bu)	3.46	2.79	2.35	1.64	1.88	2.01	2.03	2.03	2.09	2.74
Sorghum, No. 2 yellow, Kansas City (\$/cwt)	5.22	4.46	3.72	2.73	3.20	3.24	3.27	3.16	3.21	4.58
Barley, feed, Duluth (\$/bu) 2/	2.48	2.09	1.53	1.44	1.73	1.77	1.88	1.94	1.98	2.41
Barley, malting, Minneapolis (\$/bu)	2.84	2.55	2.24	1.89	2.07	2.15	2.08	2.11	2.24	3.61
Exports										
Corn (mil bu)	1,902	1,865	1,241	1,504	120.8	125.0	165.3	167.3	181.2	--
Feed grains (mil metric tons) 3/	56.5	56.6	36.6	46.3	3.4	4.0	5.2	5.2	5.3	--
	Marketing year 1/				1987	1988				
	1983/84	1984/85	1985/86	1986/87	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug
Corn										
Stocks, beginning (mil bu)	3,523	1,006	1,648	4,040	8,248	6,332	4,882	9,769	7,635	5,830
Domestic use:										
Feed (mil bu)	3,818	4,079	4,095	4,717	1,091	768	1,488	1,444	960	--
Food, seed, ind. (mil bu)	975	1,091	1,160	1,191	325	315	292	282	330	--
Exports (mil bu)	1,902	1,865	1,241	1,504	500	368	398	408	514	--
Total use (mil bu)	6,694	7,036	6,496	7,410	1,917	1,451	2,178	2,134	1,804	--

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Aggregated data for corn, sorghum, oats, and barley. -- = not available.

Information contact: James Cole (202) 786-1840.

Table 21.—Fats &amp; Oils

	Marketing year 1/				1987	1988				
	1983/84	1984/85	1985/86	1986/87	May	Jan	Feb	Mar	Apr	May
Soybeans										
Wholesale price, No. 1 yellow, Chicago (\$/bu) 2/	7.78	5.88	5.20	5.03	5.46	6.13	6.14	6.24	6.64	7.29
Crushings (mil bu)	982.7	1,030.5	1,052.8	1,178.8	95.3	106.7	99.8	107.6	102.6	98.0
Exports (mil bu)	742.8	600.7	740.7	756.9	37.6	77.0	97.0	74.8	65.1	39.7
Stocks, beginning (mil bu)	344.6	175.7	316.0	536.0	85.2	145.0	141.8	139.3	133.8	113.9
Soybean oil										
Wholesale price, crude, Decatur (cts/lb)	30.55	29.52	18.02	15.36	16.22	21.98	20.94	20.22	21.67	26.55
Production (mil lb)	10,862.8	11,467.9	11,617.3	12,783.1	1,037.6	1,170.2	1,091.8	1,186.9	1,132.7	1,086.9
Domestic disp. (mil lb)	9,589.6	9,888.5	10,045.9	10,820.1	918.2	804.0	962.9	809.3	1,003.7	2,384.0
Exports (mil lb)	1,813.7	1,659.9	1,257.3	1,184.5	47.4	25.7	281.0	273.7	87.7	138.6
Stocks, beginning (mil lb)	1,260.9	720.5	632.5	946.6	2,344.1	2,050.5	2,390.9	2,238.9	2,342.8	2,385.2
Soybean meal										
Wholesale price, 44% protein, Decatur (\$/ton)	188.21	125.46	154.88	162.61	174.90	193.75	183.00	191.80	200.40	223.50
Production (thou ton)	22,756.2	24,529.9	24,951.3	27,758.8	2,245.6	2,554.4	2,377.1	2,572.8	2,449.9	2,338.7
Domestic disp. (thou ton)	17,538.8	19,481.3	19,117.2	20,387.4	1,740.1	1,825.2	1,475.8	1,649.4	1,654.9	1,665.9
Exports (thou ton)	5,436.1	4,916.5	6,009.3	7,343.0	427.8	635.0	986.9	984.7	739.1	716.7
Stocks, beginning (thou ton)	474.1	255.4	386.9	211.7	244.0	296.2	390.4	304.9	243.7	299.5
Margarine, wholesale price, Chicago, white (cts/lb)	46.3	55.5	51.2	40.3	40.13	46.75	46.00	45.80	47.19	49.00

1/ Beginning September 1 for soybeans; October 1 for soybean meal and oil; calendar year for margarine. 2/ Beginning April 1, 1982, prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Bickerton (202) 786-1824.

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1/ Percentage of base acres farmers participating in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive program benefits. In addition to the percentages shown for 1983/84, farmers had the option of submitting bids to retire their entire base acres. 2/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 3/ Percentage of program yield, except 1986/87 wheat, which is dollars per bushel. 1983 and 1984 PIK rates apply only to the 10-30 and 10-20 portions, respectively. 4/ Payment rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 5/ Annual average world market price. 6/ The sorghum, oats and barley programs were the same as for corn each year except 1983/84, when PIK was not offered on barley and oats, and in 1988 for oats. 7/ There are no target prices, acreage programs, or payment rates for soybeans. 8/ Loan repayment rate. 9/ Loans may be repaid at the lower of the loan rate or world market prices.

Agricultural Outlook



Table 23.—Fruit

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 P
Citrus 1/												
Production (thou ton)	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,792	10,488	11,014	11,952	12,679
Per capita consumption (lbs) 2/	117.1	115.1	107.5	108.4	112.6	104.4	109.3	119.9	102.9	109.1	118.0	114.9
Noncitrus 3/												
Production (thou tons)	11,846	12,274	12,460	13,689	15,152	12,961	14,217	14,154	14,292	14,189	13,917	15,949
Per capita consumption (lbs) 2/	84.1	84.5	83.0	85.7	87.3	88.0	89.0	88.9	93.7	92.3	95.7	101.9
	1987						1988					
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
F.O.B. shipping point prices												
Apples (\$/carton) 4/	14.34	11.60	--	7.93	7.83	8.98	7.75	11.50	11.08	10.96	10.98	14.21
Pears (\$/box) 5/	--	--	--	12.00	10.82	9.70	9.26	11.18	8.94	12.88	15.14	17.50
Oranges (\$/box) 6/	6.29	6.18	6.01	7.36	10.23	5.45	6.19	6.24	5.99	6.42	7.87	7.76
Grapefruit (\$/box) 6/	5.58	5.95	5.07	5.07	6.81	5.84	5.34	5.25	4.86	4.50	3.96	2.89
Stocks, ending												
Fresh apples (mil lbs)	74.9	4.2	2,687.1	5,390.2	4,697.2	3,311.6	3,158.9	2,417.4	1,584.1	1,092.7	552.2	248.1
Fresh pears (mil lbs)	11.8	195.2	507.1	425.8	338.8	279.4	198.4	148.4	99.7	49.2	17.9	2.7
Frozen fruits (mil lbs)	865.7	908.3	908.7	957.9	943.1	858.2	790.4	720.1	634.6	593.3	548.5	654.4
Frozen orange juice (mil lbs)	942.1	792.6	840.0	652.8	569.0	662.4	980.4	1,073.1	1,004.1	1,018.7	1,120.1	1,180.1

1/ Crop year beginning with year indicated. 2/ Per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 3/ Calendar Year. 4/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 5/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 6/ U.S. equivalent on-tree returns. P = preliminary.  
-- = not available.

Information contact: Ben Huang (202) 786-1885.

Table 24.—Vegetables

	Calendar year											
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987		
Production												
Total vegetables (1,000 cwt) 1/	382,165	413,925	381,370	379,123	431,515	403,320	457,392	453,769	445,436	462,402		
Fresh (1,000 cwt) 1/ 2/	182,563	190,859	190,228	194,694	207,924	197,919	217,132	217,932	216,267	218,190		
Processed (tons) 3/	9,980,100	11,153,300	9,557,100	9,221,480	11,179,590	10,270,050	12,013,020	11,791,860	11,616,560	12,210,580		
Mushrooms (1,000 lbs)	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,956	--	--		
Potatoes (1,000 cwt)	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109	361,511	385,774		
Sweetpotatoes (1,000 cwt)	13,115	13,370	10,953	12,799	14,833	12,083	12,986	14,853	12,674	12,103		
Dry edible beans (1,000 cwt)	18,935	20,552	26,729	32,751	25,563	15,520	21,070	22,175	22,886	26,309		
	1987						1988					
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Shipments												
Fresh (1,000 cwt) 4/	35,745	23,791	17,075	20,213	16,104	15,445	18,964	17,690	23,141	18,271	18,927	26,488
Potatoes (1,000 cwt)	12,622	7,631	8,514	11,384	9,718	11,021	10,685	11,759	12,702	8,890	14,970	12,356
Sweetpotatoes (1,000 cwt)	98	34	136	322	359	795	518	354	343	366	218	174

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop; all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop; all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. -- = not available.

Information contacts: Shannon Hamm or Cathy Greene (202) 786-1884.

Table 25.—Other Commodities

	Annual					1987			1988		
	1983	1984	1985	1986	1987	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June	
Sugar											
Production 1/	5,682	5,890	5,969	6,257	7,278	766	866	3,622	2,079	774	
Deliveries 1/	8,812	8,454	8,035	7,786	8,167	2,001	2,146	2,112	1,951	1,983	
Stocks, ending 1/	2,570	3,005	3,126	3,227	965	2,476	1,497	965	3,567	2,467	
Coffee											
Composite green price N.Y. (cts/lb)	131.51	142.95	137.46	185.18	109.14	105.91	99.16	116.12	121.98	121.44 P	
Imports, green bean equiv. (mil lbs) 2/	2,259	2,411	2,550	2,596	2,638	790	645	640	585	450 P	
	Annual					1987			1988		
	1985	1986	1987 P	May	Dec	Jan	Feb	Mar	Apr	May	
Tobacco											
Prices at auctions 3/											
Flue-cured (\$/lb)	1.72	1.52	--	NQ	NQ	NQ	NQ	NQ	NQ	NQ	
Burley (\$/lb)	1.59	1.57	--	NQ	1.58	1.51	1.51	NQ	NQ	NQ	
Domestic consumption 4/											
Cigarettes (bil)	594.0	584.0	577.0	51.0	48.5	32.4	46.1	52.3	44.8	51.6	
Large cigars (mil)	3,226	3,090	2,757	233.1	220.2	151.4	192.6	223.9	196.3	223.8	

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. P = preliminary.  
-- = not available. NQ = no quote.

Information contacts: (sugar) Peter Buzzanell (202) 786-1888; (coffee) Fred Gray (202) 786-1888; (tobacco) Verner Grise (202) 786-1890.

Table 26.—World Supply &amp; Utilization of Major Crops, Livestock, &amp; Products

	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88 P	1988/89 F
	Million units						
<b>Wheat</b>							
Area (hectare)	237.3	228.8	231.0	229.3	228.0	220.0	219.7
Production (metric ton)	477.3	489.3	511.8	499.8	529.7	505.5	505.1
Exports (metric ton) 1/	98.7	102.0	107.0	85.0	90.7	104.4	96.3
Consumption (metric ton) 2/	460.1	474.1	492.8	495.7	522.0	533.3	533.5
Ending stocks (metric ton) 3/	130.0	145.2	164.2	168.2	175.9	148.0	119.7
<b>Coarse grains</b>							
Area (hectare)	338.7	334.6	334.2	340.8	336.9	323.2	324.4
Production (metric ton)	783.9	687.2	814.1	841.8	834.1	788.0	717.9
Exports (metric ton) 1/	90.0	93.4	100.4	83.2	83.9	82.7	84.9
Consumption (metric ton) 2/	753.3	758.3	781.0	777.8	809.2	807.5	803.1
Ending stocks (metric ton) 3/	181.4	110.8	143.9	207.8	232.7	213.2	127.9
<b>Rice, milled</b>							
Area (hectare)	140.6	144.2	144.4	144.9	145.1	142.2	145.9
Production (metric ton)	286.5	308.0	319.1	319.7	318.3	307.5	322.0
Exports (metric ton) 4/	11.9	12.6	11.5	12.8	12.7	10.9	12.4
Consumption (metric ton) 2/	286.5	304.6	311.0	320.7	322.5	315.7	322.9
Ending stocks (metric ton) 3/	43.3	46.7	54.8	54.1	49.9	41.7	40.8
<b>Total grains</b>							
Area (hectare)	716.6	707.6	709.6	715.0	710.0	685.4	690.0
Production (metric ton)	1,547.7	1,484.5	1,645.0	1,661.3	1,682.1	1,601.0	1,545.0
Exports (metric ton) 1/	200.6	208.0	218.9	181.0	187.3	198.0	193.6
Consumption (metric ton) 2/	1,499.9	1,537.0	1,584.8	1,594.2	1,653.7	1,656.5	1,659.5
Ending stocks (metric ton) 3/	354.7	302.7	362.9	430.1	458.5	402.9	288.4
<b>Oilseeds</b>							
Crush (metric ton)	143.5	135.8	150.6	154.8	161.3	166.0	167.0
Production (metric ton)	178.2	165.0	191.0	196.0	194.3	205.5	201.4
Exports (metric ton)	35.2	33.0	33.1	34.6	37.7	39.3	35.1
Ending stocks (metric ton)	20.5	15.7	21.1	26.7	23.4	21.3	14.8
<b>Meals</b>							
Production (metric ton)	98.1	92.5	101.7	104.7	110.1	113.3	112.4
Exports (metric ton)	31.6	29.7	32.3	34.4	36.4	36.2	36.6
<b>Oils</b>							
Production (metric ton)	43.4	42.1	46.1	49.4	50.5	52.4	53.2
Exports (metric ton)	14.0	13.7	15.5	16.3	17.0	17.6	17.6
<b>Cotton</b>							
Area (hectare)	31.4	31.0	33.9	31.9	29.9	32.6	34.5
Production (bale)	68.1	65.6	88.2	79.6	70.4	80.3	85.9
Exports (bale)	19.5	19.2	20.2	20.2	25.9	24.1	23.6
Consumption (bale)	68.3	68.3	70.0	75.8	82.5	82.6	82.7
Ending stocks (bale)	25.2	24.0	42.4	47.2	34.5	32.2	35.1
	1982	1983	1984	1985	1986	1987	1988 F
<b>Red meat</b>							
Production (mil metric tons)	94.8	97.5	99.3	103.3	105.6	105.4	107.5
Consumption (mil metric tons)	93.3	95.8	97.4	101.2	104.7	103.8	106.2
Exports (mil metric tons) 1/	5.8	5.9	5.9	6.2	6.6	6.5	6.7
<b>Poultry</b>							
Production (mil metric tons)	23.7	24.4	25.2	26.2	27.3	29.0	30.1
Consumption (mil metric tons)	23.3	24.3	24.8	25.9	26.9	28.5	29.7
Exports (mil metric tons) 1/	1.4	1.3	1.3	1.2	1.3	1.4	1.4
<b>Dairy</b>							
Milk production (mil metric tons)	396.9	413.0	413.4	417.8	423.9	419.0	420.8

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1983 data correspond with 1982/83, etc. P = preliminary. F = forecast.

Information contacts: Frederic Surls (202) 786-1824; (red meat & poultry) Linda Bailey (202) 786-1286; (dairy) Sara Short (202) 786-1769.

## U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products\*

	Annual			1987	1988					
	1985	1986	1987	June	Jan	Feb	Mar	Apr	May	June
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu)	3.73	3.19	3.11	2.99	3.53	3.60	3.42	3.47	3.54	4.10
Corn, f.o.b. vessel, Gulf ports (\$/bu)	2.89	2.27	1.95	2.08	2.22	2.24	2.30	2.29	2.28	3.01
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu)	2.64	2.16	1.88	2.01	2.06	2.13	2.17	2.09	2.12	2.91
Soybeans, f.o.b. vessel, Gulf ports (\$/bu)	5.83	5.45	5.55	5.82	6.45	6.46	6.55	6.92	7.38	9.38
Soybean oil, Decatur (cts/lb)	27.03	16.36	15.85	15.57	21.64	20.79	20.08	21.49	23.39	27.51
Soybean meal, Decatur (\$/ton)	127.15	157.62	175.57	187.25	193.30	184.39	191.01	199.98	224.40	290.42
Cotton, 8 market avg. spot (cts/lb)	58.55	53.47	64.35	70.42	59.70	57.83	59.66	60.07	61.55	62.92
Tobacco, avg. price at auction (cts/lb)	171.55	153.96	144.34	141.45	150.08	149.27	149.27	141.22	141.22	141.22
Rice, f.o.b. mill, Houston (\$/cwt)	18.49	14.60	13.15	10.50	21.00	24.50	24.06	24.00	21.20	20.50
Inedible tallow, Chicago (cts/lb)	14.33	9.03	13.79	14.73	18.00	17.08	17.25	16.17	16.17	17.18
Import commodities										
Coffee, N.Y. spot (\$/lb)	1.42	2.01	1.09	1.08	1.19	1.28	1.27	1.23	1.22	1.23
Rubber, N.Y. spot (cts/lb)	41.91	42.87	50.65	50.58	54.59	53.75	54.92	55.68	58.62	70.64
Cocoa beans, N.Y. (\$/lb)	.99	.88	.87	.87	.86	.78	.73	.71	.74	.71

Information contact: Mary Teymourian (202) 786-1820.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1987					1988						
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
March 1973=100												
Total U.S. trade 1/												
Nominal	99	97	97	92	90	91	91*	90*	89*	90*	93*	96*
April 1971=100												
Agricultural trade												
Nominal 2/	14,933	15,794	16,859	18,559	21,384	24,555	28,566	33,610	38,783	46,513	54,912	67,087
Real 3/	85	84	83	81	80	80	80*	79*	78*	78*	77*	81*
Soybeans												
Nominal 2/	428	444	460	491	600	596	606	612	611	612	614	618
Real 3/	71	69	69	66	65	64	64*	64*	63*	64*	65*	68*
Wheat												
Nominal 2/	88,101	93,144	99,717	109,724	126,159	145,327	169,807	200,627	232,272	279,552	330,913	405,368
Real 3/	104	103	102	99	97	99	104*	104*	106*	107*	99*	102*
Corn												
Nominal 2/	13,642	14,427	15,392	16,943	19,547	22,412	26,038	30,593	35,262	42,239	49,821	60,811
Real 3/	74	73	72	69	69	69	69*	68*	67*	67*	68*	70*
Cotton												
Nominal 2/	269	292	267	280	282	282	281	279	281	280	287	298
Real 3/	87	86	86	85	83	83	82*	82*	80*	80*	80*	81*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S. dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S. total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. \*Preliminary.

Information contact: Tim Baxter, Dave Stallings (202) 786-1706.

Table 29.—Trade Balance

	Fiscal year*								May
	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
\$ million									
Exports									
Agricultural	40,481	43,780	39,097	34,769	38,027	31,201	26,309	27,859	33,500
Nonagricultural	169,846	185,423	176,308	159,373	170,014	179,236	176,628	202,331	23,134
Total 1/	210,327	229,203	215,405	194,142	208,041	210,437	202,937	230,190	26,105
Imports									
Agricultural	17,276	17,218	15,485	16,373	18,916	19,740	20,875	20,643	21,000
Nonagricultural	223,590	237,469	233,349	230,527	297,736	313,722	342,855	367,381	34,668
Total 2/	240,866	254,687	248,834	246,900	316,652	333,462	363,730	388,024	36,344
Trade balance									
Agricultural	23,205	26,562	23,612	18,396	19,111	11,461	5,434	7,216	12,500
Nonagricultural	-53,744	-52,046	-57,041	-71,154	-127,722	-134,486	-166,227	-165,050	-11,534
Total	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,793	-157,834	-10,239

\*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept. 30, 1987. 1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value). F = forecast. -- = not available.

Information contact: Steve MacDonald (202) 786-1822.



Table 30.—U.S. Agricultural Exports &amp; Imports

	Fiscal year*				May	Fiscal year*				May
	1985	1986	1987	1988 F	1988	1985	1986	1987	1988 F	1988
	Thousand units					\$ million				
EXPORTS										
Animals, live (no) 1/	996	570	275	--	32	255	344	331	--	17
Meats & preps., excl. poultry (mt)	427	451	548	2/500	52	906	1,012	1,300	--	155
Dairy products (mt)	423	480	445	--	32	414	431	490	500	47
Poultry meats (mt)	234	265	376	400	34	257	282	406	--	39
Fats, oils, & greases (mt)	1,217	1,355	1,220	3/1,200	88	608	477	417	--	37
Hides & skins incl. furskins	--	--	--	--	--	1,325	1,440	1,666	--	148
Cattle hides, whole (no) 1/	25,456	25,596	24,337	--	1,900	1,019	1,131	1,254	--	122
Mink pelts (no) 1/	2,237	2,697	2,760	--	158	60	65	103	--	6
Grains & feeds (mt)	93,903	74,358	90,213	--	10,630	13,285	9,472	9,059	4/11,800	1,219
Wheat (mt)	28,523	25,501	28,204	39,000	4,019	4,264	3,260	2,877	5/4,400	445
Wheat flour (mt)	718	1,094	1,305	1,200	109	164	203	207	--	9
Rice (mt)	1,972	2,382	2,454	2,300	222	677	648	551	800	88
Feed grains, incl. products (mt)	55,362	36,236	47,605	52,300	5,256	6,884	3,817	3,752	4,600	499
Feeds & fodders (mt)	6,533	8,392	10,113	6/11,000	977	1,004	1,286	1,455	--	156
Other grain products (mt)	795	1,015	750	--	68	293	332	284	--	30
Fruits, nuts, and preps. (mt)	1,907	2,003	2,141	--	230	1,687	1,766	2,049	--	204
Fruit juices incl. froz. (hl) 1/	4,641	3,652	4,362	--	645	200	148	185	--	29
Vegetables & preps. (mt)	1,420	1,442	1,625	--	160	946	997	1,174	--	113
Tobacco, unmanufactured (mt)	257	224	224	200	16	1,588	1,318	1,204	1,200	95
Cotton, excl. linters (mt)	1,277	482	1,306	1,400	113	1,945	678	1,419	2,200	171
Seeds (mt)	289	269	305	--	19	352	367	371	400	22
Sugar, cane or beet (mt)	355	375	582	--	9	65	75	113	--	4
Oilseeds & products (mt)	23,803	27,583	29,653	--	1,925	6,195	6,271	6,293	7,700	528
Oilseeds (mt)	17,886	20,684	21,833	21,400	1,126	4,324	4,394	4,408	--	297
Soybeans (mt)	16,621	20,139	21,322	21,200	1,081	3,876	4,174	4,191	4,900	275
Protein meal (mt)	4,606	5,614	6,786	6,200	666	853	1,132	1,347	1,400	153
Vegetable oils (mt)	1,311	1,284	1,035	--	133	1,018	746	538	--	79
Essential oils (mt)	12	7	8	--	1	105	105	111	--	10
Other	443	568	564	--	48	1,069	1,126	1,271	--	133
Total	125,967	109,862	129,210	145,500	13,357	31,201	26,309	27,859	33,500	2,971
IMPORTS										
Animals, live (no) 1/	2,120	1,885	1,994	--	135	569	637	610	700	53
Meats & preps., excl. poultry (mt)	1,123	1,139	1,282	--	104	2,214	2,248	2,797	--	223
Beef & veal (mt)	674	693	778	790	63	1,295	1,252	1,575	1,700	136
Pork (mt)	416	406	462	500	37	847	900	1,125	1,100	79
Dairy products (mt)	418	400	461	465	26	763	786	849	900	66
Poultry and products 1/	--	--	--	--	--	93	101	112	--	7
Fats, oils, & greases (mt)	21	22	21	--	2	18	17	18	--	2
Hides & skins, incl. furskins 1/	--	--	--	--	--	240	200	304	--	24
Wool, unmanufactured (mt)	43	53	59	--	5	145	160	197	--	27
Grains & feeds (mt)	2,070	2,311	2,336	2,600	252	604	668	727	700	68
Fruits, nuts, & preps., excl. juices (mt)	4,483	4,637	4,835	4,725	466	1,891	1,976	2,178	--	202
Bananas & plantains (mt)	3,022	3,042	3,106	3,100	256	752	740	817	800	72
Fruit juices (hl) 1/	35,112	31,539	33,888	30,000	1,803	995	698	728	--	56
Vegetables & preps. (mt)	2,140	2,199	2,446	2,550	168	1,347	1,560	1,509	1,600	132
Tobacco, unmanufactured (mt)	191	208	224	175	18	556	606	634	600	56
Cotton, unmanufactured (mt)	31	41	38	--	2	17	14	7	--	1
Seeds (mt)	92	89	133	120	6	91	111	156	100	10
Nursery stock & cut flowers 1/	--	--	--	--	--	318	353	369	--	34
Sugar, cane or beet (mt)	2,338	1,905	1,492	900	96	912	654	497	--	35
Oilseeds & products (mt)	1,271	1,508	1,572	1,650	108	784	639	579	600	55
Oilseeds (mt)	253	197	165	--	16	98	69	56	--	5
Protein meal (mt)	159	138	245	--	17	17	15	30	--	3
Vegetable oils (mt)	859	1,173	1,162	--	75	670	555	493	--	47
Beverages excl. fruit juices (hl) 1/	15,494	15,488	15,549	--	1,396	1,622	1,848	1,923	--	172
Coffee, tea, cocoa, spices (mt)	1,868	1,940	1,915	--	123	4,983	6,099	4,867	--	299
Coffee, incl. products (mt)	1,128	1,223	1,207	1,200	72	3,244	4,400	3,232	2,700	190
Cocoa beans & products (mt)	539	507	503	550	34	1,285	1,189	1,088	1,300	69
Rubber & allied gums (mt)	799	801	824	840	68	680	615	714	900	76
Other	--	--	--	--	--	900	885	868	--	78
Total	--	--	--	--	--	19,740	20,875	20,643	21,000	1,676

\*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept 30, 1987. 1/ not included in total volume. 2/ Forecasts for footnoted items 2/-6/ are based on slightly different groups of commodities. Fiscal 1987 exports of categories used in the 1988 forecasts were 2/ 503 thousand mt. 3/ 1,204 thousand mt. 4/ 9,302 million. 5/ 3,086 million, i.e. includes flour. 6/ 10,003 thousand mt. F = forecast. -- = not available.

Information contact: Steve MacDonald (202) 786-1822.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*				May	Change from year* earlier				May
	1985	1986	1987	1988 F	1988	1985	1986	1987	1988 F	1988
	\$ million					Percent				
Western Europe	7,183	6,848	7,203	7,600	567	-22	-5	5	6	39
European Community (EC-12)	6,668	6,432	6,771	7,100	519	-23	-4	5	4	36
Belgium-Luxembourg	470	361	423	--	0	-44	-23	17	--	-100
France	396	431	494	--	0	-22	9	15	--	-100
Germany, Fed. Rep.	900	1,001	1,266	--	83	-29	11	26	--	24
Italy	677	693	733	--	0	-12	2	6	--	-100
Netherlands	1,926	2,042	1,950	--	143	-14	6	-5	--	34
United Kingdom	628	628	642	--	55	-20	0	5	--	41
Portugal	502	308	268	--	18	-28	-39	-13	--	6
Spain, incl. Canary Islands	832	723	654	--	70	-32	-13	-10	--	180
Other Western Europe	515	415	432	500	47	-16	-19	4	25	74
Switzerland	232	128	145	--	0	-26	-45	13	--	-100
Eastern Europe	532	447	453	600	70	-28	-16	1	20	150
German Dem. Rep.	81	52	66	--	8	-39	-36	27	--	700
Poland	126	42	63	--	27	-36	-66	50	--	93
Yugoslavia	137	134	131	--	6	-24	-2	-2	--	-25
Romania	88	112	115	--	18	-43	27	3	--	100
USSR	2,525	1,105	659	1,700	265	1	-56	-40	143	102
Asia	11,933	10,494	11,989	15,200	1,326	-22	-12	14	27	34
West Asia (Mideast)	1,452	1,243	1,663	2,100	167	-22	-14	34	24	15
Turkey	129	111	117	--	19	-42	-13	5	--	171
Iraq	371	335	524	800	57	-12	-10	56	60	-5
Israel	300	255	244	--	20	-15	-15	-4	--	-35
Saudi Arabia	381	335	489	500	44	-23	-12	46	0	38
South Asia	599	517	345	--	49	-31	-14	-33	--	227
Bangladesh	205	94	111	--	2	31	-54	18	--	100
India	129	90	93	--	21	-66	-30	3	--	425
Pakistan	228	285	98	400	18	-20	25	-66	300	80
China	239	83	235	500	30	-65	-65	183	150	36
Japan	5,663	5,139	5,553	6,600	621	-18	-9	8	18	38
Southeast Asia	842	724	707	--	98	-31	-14	-2	--	63
Indonesia	204	172	152	--	22	-53	-16	-12	--	47
Philippines	285	269	259	400	41	-5	-6	-4	33	78
Other East Asia	3,138	2,788	3,485	4,300	361	-14	-11	25	23	22
Taiwan	1,342	1,109	1,354	1,600	142	-5	-17	22	14	15
Korea, Rep.	1,400	1,277	1,693	2,100	182	-23	-9	33	24	33
Hong Kong	396	400	436	500	37	-3	1	9	25	6
Africa	2,527	2,134	1,784	2,200	177	-12	-16	-16	22	22
North Africa	1,207	1,401	1,279	1,600	133	-22	16	-9	23	29
Morocco	156	159	196	--	5	-54	2	23	--	-79
Algeria	220	329	244	600	59	36	50	-26	200	211
Egypt	766	875	761	800	49	-13	14	-13	0	-16
Sub-Saharan	1,320	733	505	600	44	-1	-44	-31	20	7
Nigeria	367	158	67	--	1	6	-57	-58	--	-50
Rep. S. Africa	189	70	49	--	9	-64	-63	-30	--	125
Latin America & Caribbean	4,570	3,598	3,765	4,000	381	-13	-21	5	5	25
Brazil	557	445	418	300	5	27	-20	-6	-25	-76
Caribbean Islands	771	752	829	--	64	-7	-2	10	--	-4
Central America	361	334	377	--	39	-9	-7	13	--	18
Colombia	238	137	115	--	16	8	-42	-16	--	100
Mexico	1,566	1,114	1,215	1,300	180	-20	-29	9	8	84
Peru	106	108	140	--	8	-53	2	30	--	60
Venezuela	721	493	459	600	47	-7	-32	-7	20	-13
Canada	1,727	1,466	1,776	2,000	169	-11	-15	21	11	4
Oceania	204	216	230	200	15	-6	6	6	0	15
Total	31,201	26,309	27,859	33,500	2,971	-18	-16	6	20	36
Developed countries	15,225	13,954	15,014	16,700	1,396	-21	-8	8	11	31
Less developed countries	12,680	10,719	11,499	14,000	1,209	-15	-15	7	22	29
Centrally planned countries	3,296	1,636	1,347	2,800	366	-16	-50	-18	115	102

\*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept. 30, 1987.

F = forecast. -- = not available.

Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1822.

## Farm Income

Table 32.—Farm Income Statistics

	Calendar years										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	\$ billion										
1. Farm receipts	114.3	133.8	142.0	144.1	147.1	141.1	146.8	149.0	140.2	143.6	148 to 153
Crops (incl. net CCC loans)	53.2	62.3	71.7	72.5	72.3	67.1	69.5	74.2	63.6	61.9	66 to 68
Livestock	59.2	69.2	68.0	69.2	70.3	69.4	73.0	69.8	71.5	76.2	77 to 79
Farm related 1/	1.9	2.2	2.3	2.5	4.5	4.5	4.4	5.0	5.1	5.6	5 to 7
2. Direct Government payments	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7.7	11.8	16.7	14 to 16
Cash payments	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8.1	6.7	6 to 8
Value of PIR commodities	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	10.0	7 to 9
3. Total gross farm income (4+5+6) 2/	128.4	150.7	149.3	166.3	163.5	153.1	174.9	166.2	159.8	169.8	165 to 170
4. Gross cash income (1+2)	117.3	135.1	143.3	146.0	150.6	150.4	155.2	156.8	152.0	160.4	163 to 168
5. Nonmoney income 3/	9.3	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.6	10.0	8 to 10
6. Value of inventory change	1.9	5.0	-6.3	6.5	-1.4	-10.9	6.3	-2.4	-2.8	-6	-6 to -8
7. Cash expenses 4/	84.2	101.7	109.1	113.2	112.5	113.5	116.6	110.2	100.6	103.3	106 to 109
8. Total expenses	103.2	123.3	133.1	139.4	140.0	140.4	142.7	134.0	122.3	123.5	126 to 129
9. Net cash income (4-7)	33.1	33.4	34.2	32.8	38.1	36.9	38.7	46.6	51.4	57.1	55 to 60
10. Net farm income (3-8)	25.2	27.4	16.1	26.9	23.5	12.7	32.2	32.3	37.5	46.3	38 to 43
Deflated (1982\$)	34.9	34.9	18.8	28.6	23.5	12.2	29.7	29.1	32.9	39.4	30 to 35
11. Off-farm income	29.7	33.8	34.7	35.8	36.4	37.0	38.9	42.6	44.6	46.8	48 to 50
12. Loan changes 5/:											
Real estate	7.6	13.0	9.3	9.4	4.0	2.3	-1.1	-6.0	-9.2	-7.7	-2 to -4
Nonreal estate	8.3	10.9	5.9	6.2	3.4	0.9	-0.8	-9.6	-10.7	-4.9	0 to 1
14. Rental income plus monetary change	4.1	6.3	6.1	6.4	6.3	5.3	8.9	8.8	7.8	6.8	7 to 9
15. Capital expenditures 5/	17.9	19.9	18.0	16.8	13.3	12.7	12.5	9.6	8.6	9.8	9 to 11
16. Net cash flow (9+12+13+14-15)	35.1	43.7	37.5	37.9	38.4	32.9	33.3	30.9	30.9	41.5	50 to 55

1/ Income from machine hire, custom work, sales of forest products, and other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add because of rounding. F = forecast.

Information contact: Richard Kodl (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	\$ billion										
Assets											
Real estate	601.9	706.2	782.9	784.7	748.8	739.6	639.6	558.6	510.1	522.6	534 to 544
Non-real estate	175.3	201.6	213.2	212.0	212.4	205.7	208.9	190.4	181.5	186.3	182 to 188
Livestock & poultry	51.3	61.4	60.6	53.5	53.0	49.7	49.6	46.3	47.6	57.6	59 to 63
Machinery & motor vehicles	75.5	85.8	93.1	101.4	102.0	100.8	96.9	87.6	80.3	73.9	72 to 76
Crops stored 2/	25.3	29.2	33.0	29.1	27.9	23.9	29.6	23.5	19.1	20.5	14 to 18
Financial assets	23.1	25.3	26.5	28.0	29.5	31.3	32.8	33.0	34.4	34.3	33 to 35
Total farm assets	777.2	907.8	996.1	996.7	961.2	945.3	848.5	749.0	691.6	708.9	720 to 730
Liabilities											
Real estate 3/	66.7	79.7	89.6	98.7	102.5	104.8	103.7	97.7	88.5	80.8	76 to 80
Non-real estate 4/	60.7	71.8	77.1	83.6	87.0	87.9	87.1	77.5	66.8	61.9	60 to 64
Total farm liability	127.4	151.6	166.8	182.3	189.5	192.7	190.8	175.2	155.3	142.7	136 to 144
Total farm equity	649.7	756.2	829.3	814.4	771.7	752.6	657.7	574.8	536.3	566.3	580 to 590
	Percent										
Selected ratios											
Debt-to-assets	16.4	16.7	16.7	18.3	19.7	20.4	22.5	23.4	22.5	20.1	18 to 20
Debt-to-equity	19.6	20.0	20.1	22.4	24.6	25.6	29.0	30.5	29.0	25.2	23 to 25
Debt-to-net cash income 385	385	454	488	556	497	523	493	376	302	250	237 to 247

1/ As of December 31. 2/ Non-CDC crops held on farms plus value above loan rates for crops held under CDC. 3/ Excludes debt on operator dwellings, but includes CDC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 786-1798.



Table 34.—Cash Receipts from Farm Marketings, by State

Region State	Livestock & Products				Crops 1/				Total 1/			
	1986	1987	Apr 1988	May 1988	1986	1987	Apr 1988	May 1988	1986	1987	Apr 1988	May 1988
	\$ million 2/											
<b>North Atlantic</b>												
Maine	247	243	19	20	139	170	14	10	386	413	33	30
New Hampshire	72	66	6	6	38	38	3	2	110	104	9	8
Vermont	361	377	29	30	36	35	2	2	397	412	31	31
Massachusetts	130	124	11	11	286	268	18	15	416	393	29	26
Rhode Island	12	12	1	1	63	63	6	4	76	75	7	5
Connecticut	209	196	15	15	166	170	17	13	374	366	32	28
New York	1,808	1,800	143	146	782	726	51	40	2,590	2,527	194	186
New Jersey	150	140	12	12	432	423	35	33	582	563	46	45
Pennsylvania	2,242	2,319	199	202	903	905	80	68	3,145	3,224	278	269
<b>North Central</b>												
Ohio	1,586	1,614	131	134	2,003	1,808	150	117	3,589	3,422	281	251
Indiana	1,860	1,856	138	135	2,201	2,016	130	108	4,061	3,872	269	244
Illinois	2,155	2,262	179	182	4,612	3,913	361	304	6,766	6,174	540	485
Michigan	1,241	1,285	100	103	1,327	1,219	90	76	2,567	2,504	190	178
Wisconsin	4,022	4,222	345	358	845	795	36	37	4,867	5,017	380	395
Minnesota	3,408	3,645	301	309	2,622	2,165	145	202	6,030	5,809	445	511
Iowa	4,981	5,270	396	430	4,003	3,510	272	242	8,984	8,780	668	672
Missouri	1,968	2,173	190	149	1,537	1,517	100	69	3,505	3,691	290	218
North Dakota	671	760	62	50	1,639	1,548	87	104	2,310	2,308	149	154
South Dakota	1,487	1,910	165	131	889	813	49	69	2,375	2,723	214	200
Nebraska	4,251	4,848	448	387	2,562	1,975	90	110	6,813	6,823	538	497
Kansas	3,466	3,914	397	368	1,866	1,807	99	109	5,333	5,722	496	477
<b>Southern</b>												
Delaware	402	370	31	41	119	114	8	7	520	485	39	48
Maryland	811	734	60	67	374	394	57	28	1,185	1,128	117	95
Virginia	1,151	1,244	124	104	479	448	17	15	1,629	1,692	141	120
West Virginia	156	169	15	13	59	52	2	1	215	221	17	14
North Carolina	2,171	2,081	159	172	1,586	1,634	53	62	3,757	3,715	212	233
South Carolina	456	461	38	36	442	470	15	17	898	931	53	53
Georgia	1,884	1,826	160	158	1,312	1,261	56	48	3,195	3,087	215	206
Florida	1,018	1,102	101	92	3,696	4,125	652	337	4,714	5,227	752	429
Kentucky	1,362	1,506	98	77	1,040	913	36	25	2,402	2,419	135	102
Tennessee	1,041	1,107	97	86	813	826	49	39	1,854	1,933	146	125
Alabama	1,425	1,560	159	145	595	588	46	29	2,020	2,148	204	174
Mississippi	1,048	1,040	92	90	749	939	34	17	1,796	1,979	126	107
Arkansas	2,017	2,116	158	174	988	1,027	43	29	3,005	3,143	201	203
Louisiana	515	521	47	44	837	899	29	33	1,352	1,420	76	77
Oklahoma	1,874	2,052	185	197	708	700	39	47	2,582	2,752	224	244
Texas	5,517	6,059	555	526	3,186	3,027	202	229	8,704	9,086	757	755
<b>Western</b>												
Montana	652	760	65	47	469	587	41	39	1,121	1,347	106	85
Idaho	884	926	96	88	1,052	1,120	61	63	1,936	2,047	157	151
Wyoming	451	528	57	33	116	114	4	4	566	642	61	38
Colorado	2,218	2,321	225	155	888	870	45	46	3,106	3,191	270	202
New Mexico	712	817	62	51	304	331	16	20	1,016	1,147	77	70
Arizona	696	774	103	100	918	1,007	66	98	1,614	1,781	169	198
Utah	442	462	36	33	134	134	7	6	576	596	44	39
Nevada	159	167	14	16	79	76	6	3	238	243	20	19
Washington	980	982	87	91	1,828	1,860	107	87	2,807	2,841	194	179
Oregon	654	655	52	41	1,124	1,206	58	53	1,778	1,861	110	94
California	4,435	4,741	444	456	10,209	10,781	691	806	14,645	15,522	1,135	1,263
Alaska	10	11	1	1	18	19	1	1	28	29	2	2
Hawaii	84	88	7	8	481	471	40	41	565	559	48	49
<b>United States</b>	<b>71,548</b>	<b>76,218</b>	<b>6,614</b>	<b>6,321</b>	<b>63,554</b>	<b>61,876</b>	<b>4,313</b>	<b>3,965</b>	<b>135,102</b>	<b>138,094</b>	<b>10,927</b>	<b>10,286</b>

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Cash Receipts from Farming

	Annual						1987	1988				
	1982	1983	1984	1985	1986	1987	May	Jan	Feb	Mar	Apr	May
	\$ million											
Farm marketings & CCC loans *	142,594	136,567	142,436	144,015	135,102	138,094	10,367	13,212	10,123	10,650	10,927	10,286
Livestock & products	70,257	69,438	72,966	69,842	71,548	76,218	6,621	6,614	6,051	6,505	6,614	6,321
Meat animals	40,917	38,893	40,832	38,589	39,122	44,716	3,979	4,183	3,889	4,001	4,151	3,728
Dairy products	18,234	18,763	17,944	18,063	17,753	17,829	1,553	1,406	1,286	1,495	1,458	1,495
Poultry & eggs	9,520	9,981	12,223	11,211	12,678	11,487	939	865	753	863	852	941
Other	1,586	1,801	1,967	1,979	1,994	2,187	151	160	123	145	153	158
Crops	72,338	67,129	69,469	74,173	63,554	61,876	3,746	6,599	4,071	4,145	4,313	3,965
Food grains	11,412	9,713	9,740	8,993	5,631	5,411	296	421	421	347	237	423
Feed crops	17,409	15,535	15,668	22,520	16,982	13,061	493	1,619	850	814	774	748
Cotton (lint and seed)	4,457	3,705	3,674	3,687	3,551	4,027	80	657	359	160	173	121
Tobacco	3,342	2,752	2,813	2,722	1,918	1,827	0	215	30	1	23	0
Oil-bearing crops	13,817	13,546	13,641	12,474	10,592	10,800	518	1,487	731	748	803	742
Vegetables & melons	8,063	8,459	9,138	8,558	8,630	9,223	1,115	1,031	530	804	847	967
Fruits & tree nuts	6,846	6,056	6,737	6,843	7,288	7,869	439	539	526	417	386	153
Other	6,993	7,365	8,060	8,378	8,962	9,658	804	630	625	853	1,070	810
Government payments	3,492	9,295	8,430	7,704	11,813	16,747	1,050	71	105	1,160	859	416
Total	146,086	145,862	150,866	151,719	146,915	154,841	11,417	13,283	10,228	11,810	11,786	10,702

\* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar year									
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	\$ million									
Feed	19,314	20,971	20,855	18,592	21,725	19,852	18,015	16,179	16,093	18,000 to 20,000
Livestock	13,012	10,670	8,999	9,684	8,814	9,498	8,958	9,744	12,014	12,000 to 14,000
Seed	2,904	3,220	3,428	3,172	2,993	3,448	3,350	2,984	3,009	2,500 to 3,500
Farm-origin inputs	35,230	34,861	33,282	31,448	33,532	32,798	30,323	28,907	31,116	33,000 to 37,000
Fertilizer	7,369	9,491	9,409	8,018	7,067	7,429	7,259	5,787	5,392	5,500 to 6,500
Fuels & oils	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790	4,442	4,200 to 5,200
Electricity	1,447	1,526	1,747	2,041	2,146	2,166	2,150	1,942	2,393	2,000 to 3,000
Pesticides	3,436	3,539	4,201	4,282	4,154	4,767	4,994	4,485	4,588	4,000 to 5,000
Manufactured inputs	17,887	22,435	23,927	22,229	20,870	21,505	20,987	17,004	16,815	16,000 to 19,000
Short-term interest	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,795	7,305	5,500 to 6,500
Real estate interest 1/	6,190	7,544	9,142	10,481	10,815	10,733	9,878	9,131	8,202	8,000 to 9,000
Total interest charges	13,058	16,261	19,864	21,830	21,430	21,129	18,699	16,926	15,508	13,500 to 15,500
Repair & maintenance 1/ 2/	6,754	7,075	7,021	6,428	6,529	6,416	6,370	6,426	6,546	6,500 to 7,500
Contract & hired labor	8,981	9,293	8,931	10,075	9,725	9,729	9,799	9,879	10,747	10,000 to 12,000
Machine hire & custom work	2,063	1,823	1,984	2,025	1,896	2,170	2,184	1,810	1,956	1,500 to 2,500
Marketing, storage, & transportation	3,162	3,070	3,523	4,301	3,904	4,012	4,127	3,652	3,823	4,000 to 5,000
Misc. operating expenses 1/	6,771	6,881	6,909	7,262	9,089	9,106	8,232	7,993	8,311	7,000 to 8,000
Other operating expenses	27,732	28,142	28,368	30,089	31,143	31,433	30,712	29,760	31,383	29,000 to 34,000
Capital consumption 1/	19,345	21,474	23,573	24,287	23,873	23,105	20,847	18,916	17,348	17,000 to 18,000
Taxes 1/	3,871	3,891	4,246	4,036	4,469	4,059	4,231	4,125	4,345	3,700 to 4,700
Net rent to non-operator landlord	6,182	6,075	6,184	6,059	5,060	8,640	8,158	6,698	6,987	7,300 to 8,300
Other overhead expenses	29,398	31,440	34,003	34,381	33,402	35,805	33,236	29,739	28,680	28,000 to 31,000
Total production expenses	123,305	133,139	139,444	139,978	140,375	142,669	133,957	122,336	123,502	126,000 to 129,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses includes other livestock purchases and dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Richard Kodl (202) 786-1808; Chris McGath (202) 786-1804.

Table 37.—CCC Net Outlays by Commodity &amp; Function

COMMODITY/PROGRAM	Fiscal year										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 E	1989 E
	\$ million										
Feed grains	1,144	1,286	-533	5,397	6,815	-758	5,211	12,211	13,967	8,200	2,725
Wheat	308	879	1,543	2,238	3,419	2,536	4,691	3,440	2,836	557	695
Rice	49	-76	24	164	664	333	990	947	906	125	1,002
Upland cotton	141	64	336	1,190	1,363	244	1,553	2,142	1,786	757	2,609
Tobacco	157	-88	-51	103	880	346	455	253	-346	-399	-326
Dairy	24	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,166	1,183	682
Soybeans	4	116	87	169	288	-585	711	1,597	-476	-1,449	-176
Peanuts	27	28	28	12	-6	1	12	32	8	7	1
Sugar	313	-405	-121	-5	49	10	184	214	-65	-15	0
Honey	-2	9	8	27	48	90	81	89	73	82	71
Wool	39	35	42	54	94	132	109	123	152	137	85
Operating expense	97	157	159	294	328	362	346	457	535	568	583
Interest expenditure	238	518	220	-13	3,525	1,064	1,435	1,411	1,219	444	694
Export programs	417	-669	-940	65	398	743	134	102	276	281	197
Other	656	-113	1,340	-225	-1,542	1,295	-314	486	371	2,631	2,287
Total	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	13,109	11,129
FUNCTION											
Price support loans (net)	2	-66	174	7,015	8,438	-27	6,272	13,628	12,199	4,435	949
Direct payments											
Deficiency	1,024	79	0	1,185	2,780	612	6,302	6,166	4,833	3,857	4,833
Diversion	419	56	0	0	705	1,504	1,525	64	382	10	0
Disaster	367	258	1,030	306	115	1	0	0	0	0	0
Dairy termination	0	0	0	0	0	0	0	489	587	270	189
Other	1	25	0	0	0	0	0	27	60	0	44
Total direct payments	1,811	418	1,030	1,491	3,600	2,117	7,827	6,746	5,862	4,137	5,066
Purchases (net)	10	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	-1,061	193
Producer storage payments	247	254	32	679	964	268	329	485	832	498	341
Processing, storage, & transportation	128	259	323	355	665	639	657	1,013	1,659	991	697
Operating expense	97	157	159	294	328	362	346	457	535	568	583
Interest expenditure	238	518	220	-13	3,525	1,064	1,435	1,411	1,219	444	694
Export programs	417	-669	-940	65	398	743	134	102	276	281	197
Other	662	200	1,436	-265	-1,607	679	-648	329	305	2,816	2,409
Total	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	13,109	11,129

E = estimated in the fiscal 1989 Mid-Session Review. Fiscal 1989 estimated outlays do not incorporate the impact of pending drought legislation. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 447-5148

## Transportation

Table 38.—Rail Rates; Grain &amp; Fruit/Vegetable Shipments

	Annual			1987						
	1985	1986	1987 P	June	Jan	Feb	Mar	Apr	May	June
Rail freight rate index 1/ (Dec 1984=100)										
All products	100.0	100.7	100.1	100.2	103.2	103.2	103.4 P	105.2 P	105.1 P	104.8 P
Farm products	99.0	99.6	99.3	99.3	101.9	101.9	102.3 P	105.0 P	103.2 P	103.6 P
Grain	98.3	98.9	98.7	98.6	101.2	101.2	101.6 P	102.9 P	102.7 P	103.1 P
Food products	100.1	99.9	98.6	98.8	101.5	101.5	102.4 P	103.8 P	103.9 P	103.7 P
Grain shipments										
Rail carloadings (thou cars) 2/ Fresh fruit & vegetable shipments	22.9	24.4	29.1	32.2	30.8 P	33.2 P	34.2 P	33.0 P	31.9 P	31.9 P
Piggy back (thou cwt) 3/ 4/ Rail (thou cwt) 3/ 4/ Truck (thou cwt) 3/ 4/	602 532 8,298	629 563 9,031	575 654 9,187	930 911 11,496	428 P 785 P 8,980 P	473 P 613 P 8,766 P	484 P 635 P 9,622 P	539 P 533 P 10,506 P	768 P 715 P 11,554 P	789 P 782 P 11,494 P
Cost of operating trucks hauling produce 5/ Owner operator (cts/mile) Fleet operation (cts/mile)	116.1 116.7	113.1 113.6	116.3 116.5	115.4 116.0	118.1 118.0	118.3 118.1	118.3 117.7	118.9 118.4	118.5 118.3	118.5 118.0

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1987 and 1988. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: Y.Q. Hutchinson (202) 786-1840.

## Indicators of Farm Productivity

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Table 39.—Indexes of Farm Production Input Use & Productivity

(See the June 1988 issue.)

Information contact: Jim Hauven (202) 786-1459.

## Food Supply and Use

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Table 40.—Per Capita Consumption of Major Food Commodities (retail weight)

(See the May 1988 issue.)

Information contact: Judy Putnam (202) 786-1870.





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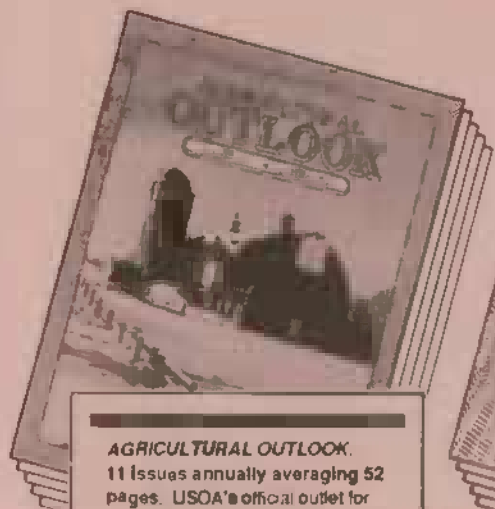
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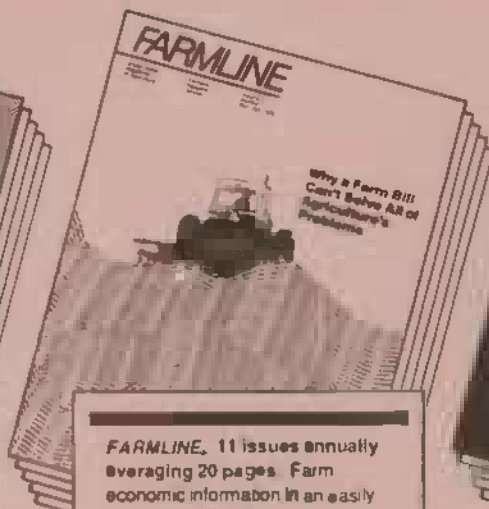
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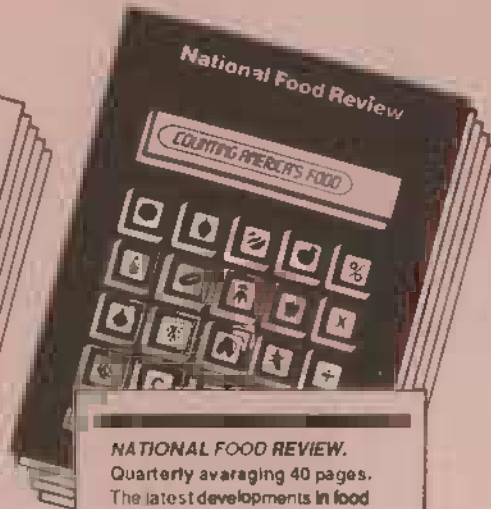
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